An Investigation of the Association of Peer Norms and Sexual Risk-Taking Behaviour in School-Going Adolescents in the Durban Metropolitan Area

By

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DECLARATION

Submitted in partial fulfillment of the requirements for the degree of Masters of Social Science (Counselling Psychology), in the Graduate Programme in the School of Psychology, University of KwaZulu-Natal, Durban, South Africa.

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. It is being submitted for the degree of Masters of Social Science (Counselling Psychology) in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa.

None of the present work has been submitted previously for any degree or examination in any other University.

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Charlene Kodi Date

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ABSTRACT

Today's youth grow up in a world riddled by HIV/AIDS and its devastating effects. In order to prevent HIV infection in youth, there is an ongoing need to understand the influences that place them at risk in order to develop programmes to mediate these influences towards healthy outcomes. Sexual risk behaviors are influenced by various factors ranging from intrapersonal to social normative and contextual/environmental factors. This study focuses on the social normative contextual influences on adolescent sexual risk behaviours in an attempt to understand sexual behaviours, in a sample of school going adolescents from grades nine, ten and eleven, in the Durban Metropolitan area (N=259). This study aimed to examine the relationship, if any, between protective peer norm influences and adolescent sexual behaviour, including sexual risk-taking behaviours, measured by the dimensions of condom use at last sexual encounter, number of sexual partners and age of sexual debut. The findings showed no significant difference in levels of protective peer norms between those who have never engaged in sexual intercourse (primary abstinence) and those that had. The findings did, however, show significantly higher levels of protective peer norm influence regarding safe sexual practices, particularly condom use, among those who reportedly used condoms at their last sexual encounter, confirming that those who practiced safer sex had higher levels of protective peer norm influence. The findings of this study suggest the need for lifeskills programmes to empower youth to challenge social norms that place youth at risk of HIV infection, and further to include interventions to facilitate the renegotiation of peer norms towards health enhancing alternatives, to protect adolescents against sexual risk behaviours.

CHAPTER ONE

INTRODUCTION

1.1. General Introduction

HIV/AIDS is a new type of global emergency with an unprecedented threat to human development, and the AIDS crisis continues to expand, spreading rapidly with serious implications for the health and welfare of the people infected and affected by this mammoth disease. Since the first case was diagnosed in 1981, and up to now, almost 27 years later, an estimated 20 million people have died as a result of HIV / AIDS (UNAIDS, 2006). AIDS mortality continues to increase, with an estimated 38.6 million people worldwide living with AIDS (UNAIDS, 2006).

Africa remains the global epicentre of the AIDS pandemic, with sub-Saharan Africa and southern Africa in particular, experiencing the worst of the AIDS epidemic with no evidence of a decline (UNAIDS, 2006). More than three quarters of all AIDS deaths globally, in 2007 occurred in sub-Saharan Africa (UNAIDS/WHO, 2007). Data from national surveys with HIV testing, antenatal clinic surveillance systems and the civil registration system in terms of mortality statistics show that Southern Africa has the largest number of infections, with an estimated 5.41 million people living with HIV in 2006. Furthermore, an estimated 1.8 million people have lost their lives to AIDS related

diseases since the epidemic began (UNAIDS, 2006). The Department of Health estimates indicate that 18.3% of adults, 15-49 years, were living with HIV in 2006 (Department of Health, 2007).

HIV prevalence varies from province to province in South Africa with more than half (55%) of all South Africans infected with HIV, from KwaZulu-Natal and Gauteng (UNAIDS/WHO, 2007). Reports also show that young women in South Africa face greater risks of becoming infected than men, with women in the 15-24 year old age group accounting for 90% of all new infections (Rehle, Shisana, Pillay, Zuma, Puren & Parker, 2007). High prevalence rates have been found in parts of KwaZulu-Natal such as the Amajuba district, where 47% of women attending antenatal clinics tested HIV positive in 2006 (Department of Health, 2007). In another house-hold based survey in a rural district in KwaZulu-Natal, Weltz et al. (2007 cited in UNAIDS/WHO, 2007) found that 51% of women between the ages of 25 and 29 years were seropositive.

Research has also indicated that of those who are infected by HIV, six out of every ten men, five out of every ten women, and nine out of every ten children live in sub-Saharan Africa, therefore HIV/AIDS needs to be both a sub-Saharan as well as a South African prerogative (Shisana, Rehle, Simbayi, Parker, Zuma, Bhana, Connolly, Jooste & Pillay, 2005). The severe impact that the current AIDS pandemic has on the people in sub-Saharan Africa, and closer to home in South Africa, demands urgent responses from all relevant stakeholders in endeavours to combat this dreaded disease.

Of grave concern is that the HIV prevalence among youth and adolescents is escalating and is rapidly destroying their lives. Shisana et al. (2005) found that KwaZulu-Natal had

the highest HIV prevalence rates among young people. The highest incidence of the epidemic was among young people between the ages of 15-24 years (Shisana, 2005). Research has shown that the most dramatic of all the developmental events in the life of the adolescent is the increase in sexual desire, highlighted by new and mysterious feelings and thoughts associated with these sexual desires (Greathead, Devenish, & Funnell, 1998). Adolescents' decisions to pursue these desires or not, are influenced by various risk factors which need to be understood in order to be appropriately addressed. Studies on adolescent sexual risk taking behavior have shed some light on influences that put adolescents at risk for their reproductive health. Influences on adolescent risk behaviours have been identified as those of attitudinal, social and intrapersonal factors that interact to influence health related behaviours (Flay & Petraitis, 1994). Furthermore, adolescents develop the need for intimacy, loyalty and psychological closeness from their friends (Berk, 2003), and they believe that their friends understand them better than their families do. The closeness of these friendships tends to be more intimate, intense, open and honest and much value is placed on peer normative beliefs. Thus, it is important to understand the influence of peer norms on adolescents' beliefs and sexual behaviours.

Research has shown that peers can either pose a negative influence to compromise adolescent sexual health, or peer norms may also promote more sexually healthy behaviours (Smylie, Medaglia, & Maticka-Tyndale, 2006). Other studies have shown that relationships seem to be driven by peer pressure (Harrison, Xaba, Kunene, & Ntuli, 2001). The current study is part of a broader study that aims to inform multi-levelled intervention strategies to prevent adolescents from engaging in sexual behaviours that would place their health at risk. Of significance and for the purpose of this study, the role of social norms, particularly peer norms in adolescent sexual risk behavior is examined.

The objective is to investigate whether there is an association between peer normative influence and adolescent sexual risk behavior. Findings from this study should be useful to inform prevention strategies to reduce the spread of HIV among young people.

Prevention programmes informed by current research need to focus on risk reduction and behaviour change among adolescents and young people who are most at risk. HIV prevention programmes aimed at decreasing prevalence can be challenging as the spread of the epidemic is fuelled by high-risk, typically stigmatized behaviour (UNAIDS/UNICEF/WHO, 2007). Behavioural change among adolescents and youth is an important weapon in the fight against HIV infection, therefore it is imperative that risk behaviours be identified and understood against the backdrop of societal and cultural contexts that serve to increase young peoples' vulnerability to HIV infection (UNAIDS/UNICEF/WHO, 2007).

1.2. Sexual Risk Behaviours

Risk behaviours in the present study were identified and measured by the constructs of age of first sexual debut, condom use at last sexual encounter and number of sexual partners. Early age of sexual debut prematurely exposes one to greater risks of HIV infection and other STI's, therefore HIV/AIDS prevention campaigns aim to focus on efforts to delay the age of sexual debut (Shisana et al., 2005). Inconsistent condom use and sexual intercourse with multiple partners increases the risk of exposure to STI's, unintended pregnancies and HIV/AIDS. Therefore, prevention messages ought to emphasise the importance of safe sexual practices such as consistent condom use and having one steady sexual partner, in the prevention of the spread of HIV infection. Studies show that individuals who reported only one sexual partner in the past year of the

study were less likely to be HIV positive in comparison with those who reported two or more partners (eg., Rehle et al., 2007). Among young people aged 15-24 years, reported condom use at last sexual encounter correlated with lower HIV incidence (Rehle et al,. 2007).

In some instances, non condom use and sexual intercourse with multiple partners are regulated by dominant peer norms where adolescents feel pressurized to engage in such risky sexual behaviours. Airhihenbuwa and Obregon (2000), state that individual decisions about behavior are mediated to a great extent by social norms. Therefore HIV/AIDS prevention requires not only widespread knowledge and easy access to condoms, but also changes in norms and attitudes in the entire community in order to effect risk reduction and behavior change among adolescents who are most at risk (UNAIDS/UNICEF/WHO, 2007). In view of the fact that consistent condom use is important in the prevention of unplanned pregnancies, HIV infection and other STI's, prevention programmes, such as those by the Department of Health, have been initiated to make condoms easily accessible in order to reduce the incidence of HIV.

In examining adolescent sexual risk behaviors, an understanding as to how adolescents are socialized into sexual beings and the role this socialization plays in sexual decision making is important. A challenge, then, is to find ways of effecting changes in social norms, particularly peer norms that serve to compromise sexual health of adolescents, in order to create a supportive environment for adolescents to initiate and maintain health enabling behaviours. The focus of this study is to examine the relationship between peer norms and adolescent sexual behaviour. Although there are various streams of influence on adolescent sexual risk behaviours, this study is delimited to the investigation of the

relationship between the social normative stream, and peer norms in particular, and adolescent sexual risk behaviour.

1.3. Conclusion

This chapter highlighted vital statistics in terms of the HIV/AIDS epidemic and outlined the overall aim of this study.

Chapter two examines literature relevant to this study in both the international and national contexts. Adolescent sexual risk behaviours in terms of age of sexual debut, condom use at last sexual encounter and multiple partners are also explored. A brief outline of gender dynamics and the theoretical framework for this study ensues. HIV prevention programmes in South Africa are also examined, followed by an outline of peer norms in terms of relevant literature. This chapter concludes with comments on implications for future research and interventions.

Chapter three outlines the aims, objectives, research questions and hypotheses of the study, as well as the methodology and procedures in terms of sampling, data collection, measuring instruments and data analysis.

Chapter four examines analyses of the results of the study. A brief report on the full sample is presented followed by a report on the sub-sample of sexually active respondents.

The fifth and final chapter discusses the results as reported in chapter four, in terms of the literature and theoretical framework. Finally, limitations of the study are explored and the conclusions and recommendations for future research follow.

CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The following chapter explores literature relevant to the study in terms of adolescent sexual risk behavior in the general international context as well as the South African context. A review of relevant literature follows with regards to adolescent sexual risk behavior in terms of age of sexual debut, condom use at last sexual encounter and multiple partners. Gender issues relating to adolescent sexual risk behavior are also outlined in terms of relevant literature. The theoretical framework applied to the study is examined, followed by an outline of HIV/AIDS prevention programmes. Peer norm influence on adolescent sexual risk behavior is thereafter examined in the light of international and South African literature, ending with concluding comments regarding implications for future research.

2.2. Sexual risk behaviour among adolescents

Adolescence has been defined as a phase or period in which children desire individuation or breaking away from parents, in order to realize their own potential and to try out different roles, identities, personalities and ways of behaving (Berk, 2003; Lesch & Kruger, 2004). Clark and Clark (2007) define individuation as the path toward becoming a unique individual, which is the overall quest of adolescence, entailing transitioning from childhood to preparing to engage in mainstream society as peers with other adults. Adolescents are driven to gain autonomy from parents and to conform to peer group values (Chilman, 1983), and their developmental tasks include that of identity formation, autonomy and a sense of belonging (Clark & Clark, 2007). Smylie et al. (2006) describe the developmental period of adolescence as being characterized by "heightened potential for risk-taking behaviours that have important implications for health and well-being" (p. 95). Berk (2003) states that during this time of development, the norms of adolescents' cliques or peers become powerful shapers of their behaviours, where peer acceptance and rejection becomes increasingly important to adolescents and where sexual awareness and interest in the opposite sex increases with a shift towards exploring romantic relationships.

From the literature reviewed, it becomes clear that adolescence is a time during which young people try to establish their identities in a climate of prevailing peer norms and values where peer acceptance is important to them. In addition to the many changes adolescents experience physiologically, psychologically and socially in terms of friendships, they are faced with the task of negotiating these changes in their attempts to understand who they are, and exploration is part of this process. It is expected then that

sexual behaviour forms part of the exploration and experimentation process as adolescents try to establish their identity (Lesch & Kruger, 2004). Risk-taking behaviours in particular may meet adolescents' emerging needs for autonomy, relatedness with peers, sense of personal mastery, and intimacy (Browne, Clubb, Aubrecht, & Jackson, 2001). This is corroborated by other studies that show that unprotected sexual activity and multiple sexual partners therefore contribute to the adolescent experience for a significant number of adolescents (eg., Smylie et al., 2006).

A large number of adolescents in the United States are engaging in sexual relations at young ages and similar trends are reported in other western countries (Berk, 2003). Studies conducted in Madagascar showed that 17% of 15 to 24 year olds indicated at least one casual sexual encounter in the year prior to the study (eg., Rahamefy, Rivard, Ravaoarinoro, Ranaivohari, Rasamindrakotroka & Morisset, 2008). The above mentioned studies point to the high risk sexual behavior that adolescents are engaging in, which is cause for concern as young people are becoming more vulnerable to the exposure of HIV and other sexually transmitted diseases, as well as the possibility of unintended pregnancies. Matthews, Guttmacher, Flisher, Mtshizana, Hani and Zwarenstein (2005) support the view that adolescent sexual risk behavior raises important health and social consequences, apart from moral and ethical issues and suggest that adolescence is a critical period for HIV prevention with schools being particularly important for adolescent sexual behavior interventions.

The HIV/AIDS pandemic has grave consequences particularly for our youth as the youth account for over 40% of all new infections worldwide (UNAIDS, 2006). Even though the youth have knowledge of HIV and other STI's, South Africa has high levels of HIV

amongst young people (Campbell & MacPhail, 2002), with the risk of HIV infection as high as two-in-three in many rural and urban South African areas (Gregson, Terceira, Mushati, Nyamukapa, & Campbell, 2004). Petersen, Bhagwanjee, Bhana and Mahintsho (2004) conclude that knowledge and information with regards to HIV/AIDS does not necessarily lead to behavior change. Lesch and Kruger (2004) posit that there is a dearth of information on adolescent sexual behaviour in various contexts and it therefore becomes imperative that adolescent sexuality within South Africa's diverse contexts be explored. An understanding of adolescent sexual risk behaviour in various contexts, as well as the factors influencing adolescent sexual risk behaviour has important implications for the development of prevention programmes for our young people.

2.2.1. General International Trends

The UNAIDS/UNICEF/WHO Children and AIDS Second Stocktaking Report (2007) reports an estimated 2.1 million children under age 15 living with HIV in 2007. Approximately half of all new infections worldwide are among children and young people up to 25 years of age and the percentage of women, 15 years and older infected with HIV is rising globally (UNAIDS/WHO, 2007). Of the estimated 5.4 million young people aged 15-24 living with HIV in 2007, an estimated 710 000 are from South Asia, 560 000 are from East Asia and the Pacific and 420 000 are from Latin America and the Carribean (UNAIDS/UNICEF/WHO, 2007).

The UNAIDS (2006) report indicates that there is an estimated 8.3 million people living with HIV in Asia with more than two thirds of them from India. In China, approximately 650 000 people were living with HIV, while the virus had spread to all 59 provinces in

Vietnam (UNAIDS, 2006). The epidemic continues to expand in eastern Europe with an estimated 1.5 million people living with HIV, which is an increase of twenty fold in less than a decade, and the majority of people living with HIV in eastern Europe are from the Ukraine (UNAIDS, 2006). The Carribean remains the second most affected region in the world with AIDS being the leading cause of death among adults, 15 to 44 years old (UNAIDS, 2006).

Studies show that 46.8% of all high school students reported having had sexual intercourse in their lifetime (eg., Klein, Barratt, Blythe, Braverman, Diaz, Rosen, & Wibbelsman, 2007). A study on adolescent risk and sexual health behaviours in Canada found that youth initiate sexual intercourse between 16 and 19 years of age, with 50% of grade 11 students reporting more than one sexual partner and 40% of the youth reporting not having used a condom at last sexual intercourse (Smylie et al., 2006).

2.2.2. Sexual Risk Behavior among South African Adolescents in the Context of HIV/AIDS

Statistics show that sub-Saharan Africa accounts for 3.28 million of the 5.4 million young people aged 15-24 years living with HIV in 2007 (eg., UNAIDS/UNICEF/WHO, 2007). The UNAIDS (2006) global report revealed that young people, especially those within the 15-24 year age group, are most susceptible to sexual risk behaviours. Young people are sexually active at younger ages than previous generations and have little experience of using condoms, and many of them consider condom use synonymous with decreased sexual pleasure (Zwane, Mngadi, & Nxumalo, 2004). Research shows that sub-Saharan Africa remains the worst affected region in the world, and the number of people living

with HIV in this region is still growing, with South Africa having the highest HIV prevalence rates worldwide (UNAIDS, 2006).

The primary method of HIVAIDS transmission in South Africa is heterosexual intercourse (UNAIDS, 2006). Gilbert and Walker (2002, cited in Matthews et al., 2005) estimated that 1500 new HIV infections occurred daily in South Africa, with 60% of these in people aged 15-25 years old. Rehle et al. (2007) state that South African women among the 15-24 year age group account for about 90% of new HIV infections in this age group. In 2007, southern Africa accounted for almost a third (32%) of all new infections and AIDS related deaths globally (UNAIDS/WHO, 2007). Statistics from antenatal clinic attendees (Department of Health, 2007), show that the HIV prevalence among pregnant women is highest in KwaZulu-Natal (39%) and lowest in the Northern Cape (15%) and Western Cape (16%).

The national survey on HIV and sexual behaviour among 15 to 24 year old South African youths showed that, by province, the highest overall HIV prevalence (14.1%), was in KwaZulu-Natal (Pettifor, Rees, Steffenson, Hlongwa-Madikizela, Macphail, Vermaak & Kleinschmidt, 2004). The same study showed that in the 15-24 year age group, 15.5% of females and 4.8% of males were seropositive (Pettifor et al., 2004). Rehle et al. (2007) indicated that of all new infections, 34% occurred in young people aged 15-24 years.

A comprehensive study on HIV prevalence in South Africa by Shisana et al. (2005) indicated that KwaZulu-Natal was found to have the highest HIV prevalence (16.1%) with the Western Cape having the lowest HIV prevalence (2.3%). The same study showed HIV prevalence among youth 15 to 24 years of age to be 10.3%, among 15 to 19

year old males it was 3.2%, and among 15 to 19 year old females it was 9.4% (Shisana et al., 2005). The HIV prevalence among African youth 15 to 24 years old was 12.3% (Shisana et al., 2005). As compared to the 2002 survey conducted by the HSRC, the prevalence among the 15 to 24 year olds increased from 9.3% to 10.3%.

The literature reviewed clearly shows the unprecedented threat that HIV/AIDS poses, particularly to the adolescent population in South Africa, and the urgency of the need to address the threat of HIV/AIDS cannot be overemphasized.

2.2.2.1. Sexual debut

In comparison to the national survey conducted in 2002 which showed that 14.4% of the respondents reported age of sexual debut to be 14 years of age (Reddy, Panday, Swart, Jinabhai, Amosun, James, Monyeki, Stevens, Morejele, Kambaran, Omardien, & Van den Borne, 2003), a more recent survey indicates age of sexual debut occurring at a much younger age among 15-24 year olds (Shisana et al., 2005). Pettifor et al. (2004) found that the median age of first sexual debut among sexually experienced 15-24 year olds was 17 years. The same study showed that 8% reported age of sexual debut at 14 years or younger (Pettifor et al., 2004). The Transition to Adulthood Study Team (n.d.) found that 25% of youth experienced sexual debut prior to the age of 16 years, while males and Black youth reported having had their first sexual encounter earlier on average than females and non-black youth. Peltzer and Pengpid (2006) found that there were slight gender differences in terms of age of sexual debut where the mean age of sexual debut for boys was 14.5 years and 14.7 years for girls, however, most boys and girls started having sexual intercourse between 14 and 16 years of age. Furthermore, a baseline survey conducted with youth between 14-22 years of age in the KwaZulu-Natal province showed

that 52% of males and 47% of females reported ever having sex, whilst 15% of the youth reported having symptoms of sexually transmitted infections in the 12 months prior to the study (The Transitions to Adulthood Study Team, n.d.).

Another study by Harrison et al. (2001) concluded that the women in their study represented a high risk cohort who had had a relatively early age of sexual debut. The same study revealed that the respondents themselves thought that sex should be delayed until the late teens or early twenties, however, this delay rarely happened (Harrison et al., 2001). Zwane et al. (2004) found that females began sexual intercourse at earlier ages (11-13 years of age) than males (14-15 years of age). De Bruyn, Skhosana, Robertson, McIntyre and Gray (2008) reported that participants in their study believed the age of sexual debut to be as early as 9 years of age, prematurely exposing adolescents to HIV.

Bell, Bhana, Petersen, McKay, Gibbons, Bannon and Amatya (2008) concur that South African adolescents in particular, are at serious risk for HIV exposure, therefore intervention with preadolescent children prior to sexual debut is important so as to prevent HIV infection in newly sexually active children. Kaaya et al. (2002a, cited in Gallant & Tyndale, 2004) support the conclusion that most youth in sub-Saharan Africa initiate sexual activity while they are of school going age which implies that schools are where prevention programmes need to be initiated.

2.2.2.2. Condom Use

Brook, Morojele, Zhang and Brook (2006) state that inconsistent condom use and sexual intercourse with multiple partners is common among South African youth, increasing the risk of unplanned pregnancies, STI's and HIV infection in particular. Most HIV infections in sub-Saharan Africa occur during long-term relationships in which condoms are seldom used (UNAIDS/UNICEF/WHO, 2007). A recent South African study on sex, sexuality and sickness in KwaZulu-Natal showed that 80% of the respondents indicated they had never used condoms at all (Hoosen & Collins, 2004). There is evidence from another national study indicating that despite most young people's awareness of HIV/AIDS and its effects, substantial numbers continue to engage in unprotected sexual activity (Lesch & Kruger, 2004).

The South African National Youth Risk Survey (Reddy et al., 2003) showed that among those who had ever had sex, only 29% used condoms consistently. Fifty percent (50%) of sexually experienced youth (LoveLife, 2001) and 71% of grades 8 to 11 learners (Reddy et al., 2003) indicated that they do not always use a condom. Another study found that half of the girls and one-third of the boys did not use any contraceptives during their first sexual intercourse, while 38% of girls and 57% of boys reported having used a condom during first sexual intercourse (Peltzer & Pengpid, 2006). In a survey conducted with 15-24 year old South African women, 71% reported inconsistent condom use in the past 12 months indicating that most women are at risk for future infection (Pettifor, Measham, Rees, & Padian, 2004).

Harrison et al. (2001) found that most females did not like to use condoms and the study concluded that the apparent lack of condom use or other means of protection provided further evidence for high risk behavior among young women. Shisana et al. (2005) found

that among 15 to 24 year old females who were sexually active in the past 12 months, 57.0% of the respondents never used any contraception at all, 6.0% were on the contraceptive pill, 17.1% were on the contraceptive injection, 11.1% used condoms and 8.0% were not using any contraceptive method. This survey also found that 2.1% of the respondents 15 years and older obtained condoms from their friends (Shisana et al., 2005).

MacPhail and Campbell (2001) found that condom use among adolescents in their study was low, with 69% having never used condoms with regular partners and 59.3% having never used condoms with casual partners. Slight gender differences were evident in that males used condoms consistently more often than females, while younger age groups made less use of condoms than the older groups (MacPhail & Campbell, 2001). Abdool Karim, Abdool Karim, Preston-Whyte and Sankar (1992) have shown that the perception among young people is that condom use is only necessary among those already infected with STD's or HIV. Furthermore, fertility is important for young men, therefore they are opposed to condom use (Abdool Karim et al., 1992).

In response to the challenges of HIV and its widespread impact, the Department of Health's National Strategic Plan 2007-2011 has identified the improvement of access to and use of male and female condoms as one of its objectives in order to reduce the rate of new HIV infections by 50% (Department of Health, 2006). However, in a climate where dominant peer norms undermine the likelihood of safe sex (Campbell & MacPhail, 2002) it becomes imperative that, in addition to improving access to and use of male and female condoms, the objective needs to include addressing the issue of peer normative influences

to change adolescents' negative normative perceptions regarding condom use in an attempt to encourage safe sexual behavior among young people.

2.2.2.3. Number of Sexual Partners

In the context of the HIV/AIDS epidemic which is seriously affecting the reproductive health of young people, it is clear that unprotected sexual intercourse with multiple partners serves to exacerbate the problem, further compromising adolescents' sexual health. Eaton, Flisher and Aaro (2003) found that high numbers of sexual partners and inconsistent condom use are some of the risk behaviours associated with the high prevalence of HIV among young people. A study by Omoteso (2006) found that 46% of the respondents preferred two sexual partners at a time, while 43 % indicated a preference for many sexual partners.

The South African National Youth Risk Survey (Reddy et al., 2003) revealed that 70.2% of those who had ever had sex had one or more sexual partners in the past three months, whilst 54.0% reported having two or more sexual partners in their lifetime. Furthermore, a higher proportion of males than females reported having multiple partners (Pettifor et al., 2004; Reddy et al., 2003; Shisana et al, 2005; Simbayi et al., 2004)). Studies have also shown that males feel pressurized by their peers to have sex early and frequently, with as many partners as possible (eg., Campbell & MacPhail, 2002). Kaaya et al. (2002 cited in Peltzer & Pengpid, 2006) reported that significant proportions of adolescents had had 2 or more partners in their lifetime. Another study by Pettifor et al. (2004) found that 12.8% of the respondents reported having had more than one sexual partner in the past 12 months. The literature reviewed shows the urgent need for intervention programmes that

discourage health compromising behaviours such as multiple sexual partners, and promote health related behaviours in attempts to curb the rapid spread of HIV infection, especially among young people.

2.2.2.4. Gender

Gender has been found to be a critical factor in contributing to the high HIV/AIDS prevalence, and the risks and vulnerability to HIV/AIDS are substantially different for men and women, with gender norms thought to play a significant role in increasing women's and girls' risk of HIV infection (Shisana, 2004). Although women are biologically more susceptible to HIV, it is important to take into consideration socio-cultural and economic factors which stem from gender inequalities, in trying to understand the vulnerability of women to HIV (Pettifor et al., 2004).

Women appear to be exposed to the disease at earlier ages than men, and older men in particular are looking towards school girls as young as 10-15 years of age for sexual exchange (Kalipeni, Craddock, & Ghosh, 2004). Some studies (eg., Hoosen & Collins, 2004) have indicated that the AIDS epidemic has often been identified as a 'gendered epidemic' in which men usually initiate, dominate and control sexual interactions, and the responsibility lies with women in terms of safer sexual practices. However, this becomes difficult in view of power imbalances in relations between men and women (Hoosen & Collins, 2004) and also due to the fact that women are not always in the economic position to say no to partners who will not assent to condom use (Kalipeni et al., 2004). Thomas (2004) concludes that young South African women are particularly vulnerable to HIV infection because of unequal power relations between men and women, and because women are largely economically marginalized. Furthermore, the contention is that

negotiating safe sex by women in terms of condom use poses a problem in the sense that South African women are expected to prove their fertility before marriage, consequently, condom use to avoid HIV infection can be viewed negatively and may not be viable (Kalipeni et al., 2004).

Women are also said to be economically , physiologically and socially dependent on men (Hoosen & Collins, 2004), hence poverty places women at greater risk for HIV infection as poor women are likely to engage in sexual activities with multiple partners in exchange for material or monetary favours. MacPhail and Campbell (2001) found that women 'engage in sexual relationships in exchange for lifts home from school, gifts and subsistence cash' (p. 1623). The study by Harrison et al. (2001) on rural KwaZulu-Natal female adolescents reinforce the power of socialisation around approved social norms by confirming that many young women are at a high risk for HIV infection in terms of complex patterns, for example, of younger ages of sexual initiation, older male partners, unprotected sex, sexual coercion and limited power in sexual negotiation and decision-making. Pettifor et al. (2004) confirmed that women with limited sexual power showed inconsistent condom use, which in turn was significantly associated with HIV infection. Furthermore, in the context of masculine norms defined by male control over sexual decision-making and prevalent coercive sex, many women reported that they did not have the right to refuse sex (Pettifor et al., 2004). From the literature reviewed, it is clear that prevention programmes need to be multi-faceted and comprehensive and should not overlook gender-based inequalities and risks in addressing the HIV/AIDS epidemic.

2.3. Theoretical Framework

A comprehensive approach to the prevention of HIV infection is clearly needed, and in view of this, the Theory of Triadic Influence (TTI) forms the theoretical basis for this study. While some theories highlight proximal cognitive predictors of behaviour, and others focus on social support and bonding processes, as well as social learning, personality and intrapersonal processes, few of these theories consider several of these views in a particular model or theory of approach (Flay & Petraitis, 2004). The TTI is a comprehensive theory, with an integration of constructs from previous theories that explain health related behaviours as being determined by reasoned intentions to engage in such behaviours and that these intentions are shaped by:

a) attitudes towards performing health related behaviours

b) perception of normative pressure to engage in that behaviour

c) perceptions of health related self-efficacy.

The TTI is comprehensive in that it acknowledges multiple influences and their impact on health related behaviours. The TTI proposes 3 streams of influence namely:

i) cultural environmental influences on knowledge and values that influence attitude.

ii) social contextual influences on social normative beliefs.

iii) intrapersonal (biology and personality) influences on control and social skills, leading to self-efficacy.

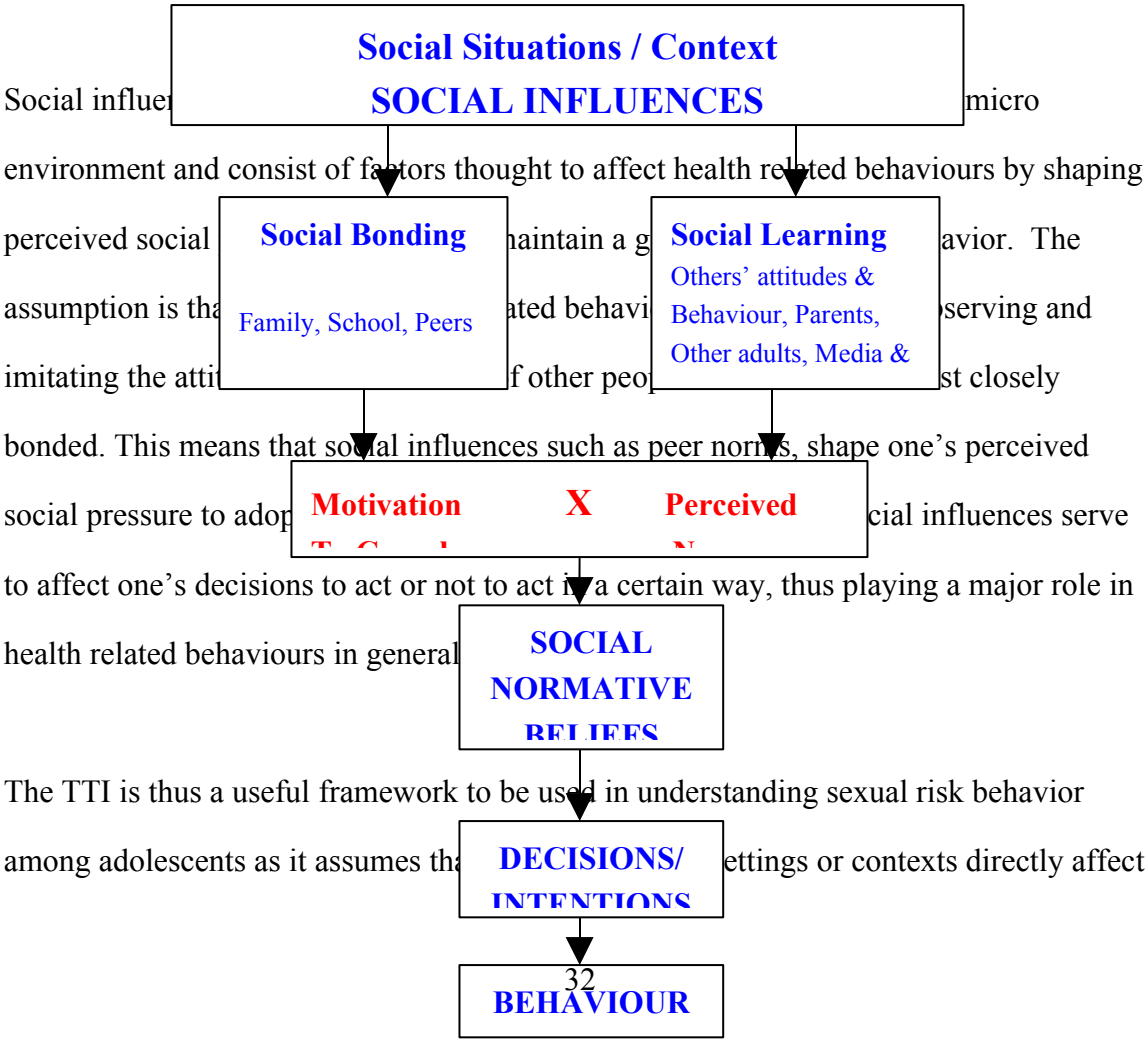
The TTI includes five 'tiers' or levels of influence and contends that each stream of influence flows through each of these five tiers. This theory is also intended to account for direct as well as indirect effects of behavior and adds new insights into the causes of health compromising behaviours and how to improve people's health promoting behaviours. In addition to the direct influences, there are other important inter-stream

effects and influences that flow between the tiers. The TTI therefore contends that attitudinal, social, and intrapersonal influences, both independently and interactively, affect health related decisions (Flay & Petraitis, 2004).

Although the TTI proposes multiple levels of influence in trying to gain a holistic understanding of health related behaviours, for the purpose of this study, we have delimited the scope of the study to the social normative stream in order to investigate the role of peer norm influences on adolescent sexual risk taking behaviour. The social normative stream represents social influences on health related behaviours. Figure 1 is a diagrammatic representation of the social normative stream of influence.

In view of the fact that the TTI is a multifaceted approach to the understanding of health related behaviours, it is acknowledged that the social normative stream of influence singularly, is unlikely to adequately explain the causes of sexual risk taking behavior among young people, and that all levels of influence must be taken into cognizance in our attempts to explain adolescent sexual risk taking behavior.

Figure 1. Social Influences on Health-related behaviour (Flay & Petraitis, 2004)



Social influe micro environment and consist of factors thought to affect health related behaviours by shaping perceived social haintain a g avior. The assumption is tha ated behavi serving and imitating the atti f other peo st closely bonded. This means that social influences such as peer norms, shape one's perceived social pressure to adop cial influences serve to affect one's decisions to act or not to act in a certain way, thus playing a major role in health related behaviours in general

The TTI is thus a useful framework to be used in understanding sexual risk behavior among adolescents as it assumes tha ettings or contexts directly affect

the individual that it is closely associated with and that perceived norms and motivation to comply jointly affect social normative beliefs directly and shapes one's choice to adopt a particular health related behaviour indirectly (Flay & Petraitis, 2004). Social settings are therefore thought to contribute to an individual's health related behaviour by affecting health related attitudes, values and behaviours of other people in the same environment, which in turn affect one's perception of norms concerning a given behavior. For example, if close friends and peers endorse health compromising behaviours such as non-condom use and multiple sexual partners, these high risk sexual behaviours become the perceived norm for the adolescent most closely associated with that particular group of friends or peers, and this would influence his/her decision to adopt or maintain behaviours involving non condom use and multiple partners.

In the light of the above, TTI suggest that interventions are likely to be successful if:-

1) Social networks are strengthened (ie. strengthening bonds and encouraging compliance) with people who hold positive related attitudes and engage in health promoting behaviours, or motivation to comply with health compromising normative behaviour is weakened.
2) Change behaviours of those people with whom a person is motivated to comply.
3) Change the perceptions that health compromising behaviours are normative, or that health promoting behaviours are not normative.

TTI also focuses on interaction between feedback loops and levels of experience with health related behaviours eg., the experience of having sex for the first time is likely to shape adolescents' knowledge about sex, as well as their relationships with each other in terms of being accepted by peers who also engage in similar behaviours. As these

behaviours become more regular, adolescents become increasingly motivated to comply with their peers. Within the social normative stream, people are more likely to repeat behaviours for which they receive praise from other people, and this reinforcement depends on the strength of the relationship with the person giving the praise (Flay & Petraitis, 2004). Therefore reinforcement strengthens the relationship which increases the likelihood of wanting to please by repeating the behaviour. In the light of the theoretical framework outlined above, our aim is to investigate the relationship between peer norms and adolescent sexual behaviour.

2.4. HIV / AIDS Prevention Programmes

HIV prevention programmes for adolescents in South Africa have entailed efforts at condom marketing, school-based lifeskills programmes by the Departments of Education and Health, dissemination of HIV/AIDS small media items through a national AIDS action office, promotion and distribution of the AIDS red ribbon, national toll free AIDS helpline, as well as television, radio and advocacy programmes by Soul City (Parker, 2003). Furthermore, provincially and locally, HIV/AIDS communication has included media campaigns and organizational and participatory activities and these activities have been ongoing since the inception of 'LoveLife'. In recognition of the fact that HIV infection is having a serious effect on young South Africans, 'LoveLife', a national HIV prevention programme for young people was launched in 1999. The aim of introducing the 'LoveLife' programme was to reduce the incidence of HIV among 15-20 year olds by 50% over a period of three to five years following the inception of the programme.

In his critique of Lovelife as a prevention programme, Thomas (2004) argues that the programme sends out confusing rather than clarifying messages, which do not address the

HIV/AIDS epidemic in South Africa. Instead, the programme serves to obscure social factors which shape gendered identities, and the use of idealized images are out of reach of the masses in impoverished towns and informal settlements of South Africa. Furthermore, the target population of Lovelife programmes are mainly those who are HIV negative, whereas those who are positive also need to be included for these campaigns to succeed, as prevention cannot be separated from treatment of and care for people living with HIV/AIDS (Thomas, 2004). There has also been criticism of Lovelife's prevention programme as not having established baseline levels of HIV infection at the outset, thus making it impossible to measure the impact of the programme as it progressed. Furthermore, timeframes have been shifted, therefore making it impossible to assess its parallel goal of establishing a new and effective model for HIV prevention (Parker, 2003).

In the light of literature reviewed lending support to findings that young people initiate sexual activity at an early age, schools are pivotal in terms of intervention programmes aimed at delaying age of sexual debut among adolescents (Matthews et al., 2005). In addition, efforts to reach adolescents and young people not attending school also need to be strengthened (UNAIDS/UNICEF/WHO, 2007). Although national campaigns and media programmes to raise awareness of HIV and promote prevention have been the focus in the past decade, it is apparent that these HIV prevention strategies are not adequately achieving their objectives of reducing HIV incidence and prevalence rates, as is evidenced by the large body of literature that emphasizes the rapid spread of the epidemic.

It is also evident that the majority of the prevention programmes focus on strengthening the individual's capacity to make healthy choices, and fail to take into account contextual factors that influence sexual risk behaviour, such as social norms, and in particular the effect of peer normative influence on adolescent sexual risk behaviours. Bell et al. (2008) posit that programmes focussing on only one area of change are likely to have less impact. The social normative stream of influence on adolescent sexual risk behaviours has been neglected, thus marginalizing the influence of the context within which an individual finds him/herself.

It is clear that prevention programmes in South Africa need to be multi-faceted in their approach in devising effective intervention strategies, taking into account individual, social and contextual factors as well as gender, violence and socio-economic factors, which all interplay in contributing to the HIV/AIDS pandemic. Prevention messages need to be focused and need to move beyond merely raising awareness of HIV/AIDS. Comprehensive approaches to prevention are necessary to bring best results in reducing the HIV/AIDS prevalence. There is no single intervention or approach that works best, thus there is a need for a comprehensive approach that integrates the various levels of influence as a target for intervention programmes. This study, which forms part of a broader study that takes into account the various streams of influence on risk behaviors, will therefore focus on the influence of peer norms on adolescent sexual risk behaviour.

2.5. Peer Normative Influence

In many African countries, sexual relationships are dominated by men, and women cannot always practice safe sex even when they know the risks involved, therefore a

change in social norms, attitudes and behaviours that contribute to the expansion of the AIDS pandemic is necessary in order to bring this epidemic to an end (UNAIDS, 2006).

2.5.1. Peer Norms in an International Context

Peer groups set the general norms of adolescent behaviour for those who are attracted to identify with group values (Herbert, 1991), and peer group behavioural norms influence sexual HIV risks (Bhattacharya, 2005). Bhattacharya (2005) therefore recommends that peer group social norms and practices be targeted in intervention programmes so as to "foster safer sexual practices and motivate constructive changes in risky behaviours" (p. 564). Harper, Gannon, Watson, Catania, and Dolcini (2004) explored the role of friendships in adolescents' early sexual experiences and found that friends played a practical and significant role in the acquisition of new dating partners and sex partners as well as in determining the course of these relationships.

Smylie et al. (2006) state that peers can either pose a negative influence by promoting less than consistent condom use and early sexual debut, or peer norms may also promote more sexually healthy behaviours. Studies carried out in London between 1992 and 1998 on young people aged 16-21, showed that sexual reputation appeared important to them and in journeying into adult sexuality, young women appeared under pressure to safeguard their reputations, while young men were under pressure to demonstrate theirs (Weeks & Holland, 1996). The same study showed that girls are often under considerable pressure to lose their virginity, but preserve their reputations (Weeks & Holland, 1996).

Gender differences in impact of peers on sexual activity indicates females experienced less pressure from peers to engage in sexual activity, with more support for abstinence

(Smylie et al., 2006), while the influence of peer behaviour on males' sexual experiences was a stronger predictor of their having had sex than their perception of female friends' behavior (Hampton, Jeffery, McWatters & Smith, 2005). Coleman and Hendry (2000) found that adolescents are more likely to experience subtle pressure to conform to group values and standards and are susceptible to peer influences at certain times, under specific conditions. Furthermore, peer pressure was used to explain "risky" activities and therefore acts as a hazard, creating unfavourable norms about behaviour (Coleman & Hendry, 2000).

White, Terry and Hogg (1994) investigated social influences on people's behavioural intentions and it was found that the group norm (that is, the perceptions that significant others engaged in that behaviour themselves, and that significant others generally approved of performing the behaviour) had significant effects on intentions to engage in safer sexual behaviour. This means that people's behavioural intentions are influenced by behaviour judged to be normatively appropriate (group norm). White et al. (1994) suggested that further research consider the possibility that people will be more likely to engage in group defining behaviours if they identify strongly with the group. Further to this, he also suggested that effects of norms may be stronger in more visible behaviours open to greater scrutiny by significant others, other than sexual behaviours, owing to the private nature of sexual behaviours. White et al. (1994) recommends that the focus be on perceived group norms of a specific referent group rather than a general pool of significant others, as "characteristics of psychologically relevant referent groups can, and do influence group members" (p. 2185).

Springer, Parcel, Baumler and Ross (2006) in their study on perceived social parental support and perceived social cohesion and the relationship to youth health risk behaviour, found a higher prevalence of sexual intercourse among males. The same study suggested that interpersonal relationships have been conceptualized at both individual and ecological levels in terms of social networks (eg., connections to friends) and social cohesion, hence supportive social relationships are important for understanding youth risk behaviour (Springer et al., 2006). This has implications for the role that supportive peer group networks can play in health enhancing behaviours, particularly with reference to adolescent sexual risk behaviours. Ainsle (2003 cited in Springer et al., 2006), found that 83% of male Nicaraguan youth were directly encouraged to engage in premarital sex by their friends', relatives' and fathers' approval of premarital intercourse. This study also shows that broader social influences for premarital sex, such as friends and relatives may reinforce a social norm of premarital sex. Furthermore, Springer et al. (2006) report that most risk behaviours studied suggest a normative influence of peer group on risk behavior, and further posit that "social relationships may serve to promote or protect adolescent health risk behaviours by reinforcing social norms" (p. 1637). Assets or deficits in influential support systems such as that of peer groups encourage health-debilitating or health-enhancing behaviours, and future research on risk behaviours may be enhanced by including measures such as peer influence, both inside and outside school (Springer et al. 2006). Although this was an international study, it has implications for local studies in our attempts to understand adolescents and the influence of social norms on risk behaviours in efforts to design appropriate intervention strategies.

The educator's report (2004), on adolescent sexual risk behaviour prevention states that effective sexuality education programmes address social pressures that influence sexual

behaviour, such as peer pressure. Seth-Purdie (2000) concludes that adolescent's association with anti-social peer groups is an important risk factor for negative outcomes in the development of children.

2.5.2. Peer Norms in the South African Context

MacPhail and Campbell (2001) refer to 'sexuality' as a socially negotiated phenomenon which is strongly influenced by peer norms. Attitudes and beliefs of peers have an influential role on other members of the peer group and literature has highlighted the way in which young people tend to internalize negative attitudes expressed by peers about condom use (MacPhail & Campbell, 2001).

In a study on help seeking patterns in urban and rural youth in South Africa, secondary school youth between the ages of 14 and 22 were interviewed in focus groups regarding their problems and whether they seek help for these problems, and it was found that female participants expressed concern about problems of teenage pregnancy and HIV / AIDS as this was as a result of early sexual relationships and peer pressure (Van Der Riet & Knoetze, 2004). Another study found that some South African male adolescents in particular, experience strong levels of peer pressure to be sexually active, resulting in increased levels of sexual activity (Brook et al., 2006). Anderson, Beutel and Maughan-Brown (2007) found that aspects of the social environment, such as peer pressure may exert influence over boys' sexual behaviours but not girls' sexual behavior.

Harrison et al. (2001) concluded that the initiation of relationships seemed to be driven by peer pressure, where girls experience subtle or overt pressure from each other as well as from their boyfriends. The study also confirmed that both boys and girls experienced various kinds of pressure to engage in sexual relationships (Harrison et al., 2001). Campbell and MacPhail (2002) have established that 'a range of peer norms undermine the likelihood of safe sex' (p.339) and suggest a multi-level approach to the development of HIV prevention programmes which includes working to change norms of sexual behaviour. It can therefore be concluded from the above mentioned studies that youth are being pressurized to subscribe to negative peer norms regarding sexual behaviours and that there is definitely a need for interventions within the social normative stream of influence to address the issue of peer normative influence on adolescent sexual risk behaviour.

Twa-Twa (1997 cited in Kinsman, Nyanzi & Pool, 2000) identified peer influence as one of the factors that could serve to suppress or promote sexual activity. Studies have shown that early experience of sex among females was important because in addition to the enjoyment, it permitted membership into an informal girls' peer group or 'club' where the pressure from peers to engage in sexual activity was very strong (eg., Kinsman et al., 2000). Another study in rural KwaZulu-Natal with boys between the ages of 16 and 19 years identified pressure from male peers to engage in multiple relationships as one of the social risk factors associated with dominant masculinity norms and practices (Harrison, 2002).

The literature reviewed suggests that there is a large body of international studies on peer norms and youth sexual risk behavior, and an emerging body of knowledge on this issue

in the South African context. This study adds to the body of knowledge on the association between peer norms and adolescent sexual risk behaviour, and the nature of this association. This information will hopefully be useful to inform intervention strategies aimed at strengthening social support networks, especially those of peer group networks, in attempting to reduce adolescent sexual risk behaviours.

2.6. Conclusion

Sub-Saharan Africa, and South Africa in particular, is more heavily affected by HIV/AIDS than any other region in the world, with an average prevalence rate of 10.8 % in the general population (Shisana et al., 2005), and with no evidence of a decline. The highest prevalence rate is among young people between the ages of 15 and 24 years (AIDS/UNICEF/WHO, 2007). For each person living with HIV, the impact on his/her life is far reaching, extending to families, friends and wider communities (UNAIDS, 2006).

Despite numerous prevention efforts by the government as well as non-governmental organizations, the pandemic continues to escalate, resulting in widespread effects on individuals, communities and the country's overall social and economic progress. Furthermore, intervention programmes that aimed to disseminate information in the hope of increasing awareness and knowledge of HIV/AIDS have not been entirely successful in changing behavior of adolescents in terms of abstinence and safer sexual practices, as is evidenced by literature on risk behaviours such as early age of sexual debut and multiple sexual partners.

In the light of the literature presented in this chapter, it is clear that the HIV/AIDS epidemic is a global threat to adolescents and that peer normative influence plays an important role in influencing adolescent sexual behavior. Both international and national literature has shown that peer normative influence varies between protective influences and negative influences for males and females. While some females experience more support from peers for abstinence, other females feel pressurized by peers to lose their virginity. Research has also shown that males feel more pressurized by peers to engage in sexual intercourse with multiple partners. Although research into peer normative influences in South Africa is limited, available literature suggests that there is an association between peer normative influence (both protective and negative) and sexual risk behaviours of adolescents. This study adds to this body of evidence.

CHAPTER THREE

RESEARCH METHODOLODGY

3.1. Introduction

The methodology used in undertaking this study, which is a quantitative and corelational study, is outlined in this chapter. Data collection has been done using a cross sectional survey and involves hypothesis testing. The aims, objectives, research questions and hypotheses of the study, as well as the methodology and procedures in terms of sampling, data collection, measuring instruments and data analysis are presented.

3.2. Aims and Objectives

The main aim of this study is to investigate the association of peer social norms and sexual risk behaviour in a sample of school going adolescents in the Durban Metropolitan area.

The two primary objectives of this study are, firstly, to determine whether higher levels of protective peer norms are associated with a delay in sexual debut in those adolescents who have never engaged in sexual intercourse (primary abstinence). The second objective is to determine whether higher levels of protective peer norms are associated with safer sexual practices (condom use) amongst adolescents who are sexually active. The findings of this study will be used to inform interventions that serve to protect adolescents from engaging in risky sexual behaviours.

3.3. Hypotheses

Hypothesis 1: Those adolescents who have never engaged in sexual intercourse have higher levels of protective peer norms than those who have engaged in sexual intercourse.

Hypothesis 2: Of those adolescents who have ever engaged in sexual intercourse, there is an association between higher levels of protective peer norms and safer sexual practices (condom use).

3.4. METHODOLOGY

A research design is defined by Terre Blanche and Durrheim (1999) as 'a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research' (p.29). The framework of this study centred on the relationship between peer norm influence which is an important factor in the socialization of adolescents into sexual beings, and adolescent sexual risk behaviour. The study was thus a quantitative one which aimed to investigate the relationship particularly between high levels of protective peer norm influence and low adolescent sexual risk behavior. This study therefore entailed hypothesis testing (Terre Blanche & Durrheim, 1999).

It is hypothesized that there is an association between higher levels of protective peer norm influence and primary abstinence as well as safer sexual practices/ condom use at last sexual encounter (low risk sexual behaviour). Hence, low adolescent sexual risk behaviour has been identified as the dependent variable and higher levels of protective peer norm influence as the independent variable.

3.4.1. Sampling

Sampling concerns the target population, contexts and behaviours that are studied (Terre Blanche & Durrheim, 1999). The sampling frame comprised of 300 secondary school learners of both sexes, between the ages of 14 and 18 years, enrolled in grades nine, ten and eleven, as this group was best suited to our study of adolescent sexual risk behaviour. The learners had been randomly selected from these grades. The study was conducted at a secondary school in the Durban Metropolitan area, owing to accessibility of learners from the school.

A total of 259 learners, aged 14 to 18 years, responded to the questionnaire. Fifty six percent of the respondents were female and 44% were male, with 81% being black African, 14% being Indian/Asian and 5% being of a mixed race/coloured.

3.4.2. Procedure

Initially, the researcher met with the school principal to discuss the nature and objectives of the study. The principal thereafter granted written consent, attached in Appendix A, for the study to be undertaken at his school, following a staff meeting to discuss this matter. Permission to do the research at the school was also sought from the superintendent of education management (SEM) of the district that the school falls under. The superintendent advised the researcher that the Research and Education Management Information Services (EMIS) sub-directorate of the Department of Education, KwaZulu-Natal, needed to be informed of the proposed study. The director of this office requested that the research proposal be submitted to the offices in Pietermaritzburg, for review by the departmental researchers. Approval was granted by the department, attached in Appendix B, subject to the department receiving a copy on completion of the study. The

department emphasized that the school programme should not be disrupted by the study, nor should it interfere with the examinations at school. Furthermore, due to issues of logistics, permission had been obtained from the school governing body, on behalf of the parents, to conduct the study with learners from the school.

Prior to the actual undertaking of the study, issues concerning the nature, purpose and motivation for the proposed study were outlined to the participants. Furthermore, issues of confidentiality, anonymity, importance of honesty and the availability of referrals for counseling were also outlined. Educators who assisted with data collection were also briefed on the nature and purpose of the study as well as the administration procedure. Researchers appealed to the educators who assisted with data collection to ensure that the questionnaires were fully completed and that respondents did not consult with each other during completion of the questionnaire. Respondents were requested to complete the questionnaire fully and as honestly as possible so that the correct information could be obtained. The school is an English medium school therefore language did not pose any barriers to completion of the questionnaire. However, prior arrangements had been made for an interpreter to assist with the facilitation of the administration of the test in the event of learners having difficulties with comprehension.

3.4.2.1. Pilot Study

A pilot study, in which the actual questionnaire was administered, was conducted prior to conducting the actual study in order to establish face validity of the questionnaire (Terre Blanche & Durrheim, 1999). This was done with a group of twenty learners randomly selected from grades ten, eleven and twelve. A brief outline with regards to the purpose

of the study was done with the learners, and issues of anonymity and confidentiality were emphasized. Learners were also informed that they were at liberty to withdraw from the study at any time, if they felt that they could not participate. Furthermore, referral sources were given to them in the event of the need for follow-up counseling.

Feedback was obtained from the learners regarding the content and nature of the study, using a focus group. The researcher was able to gain clarity around issues regarding learners' comprehension of and ability to answer the questionnaire with ease. Furthermore, the researcher was able to estimate the approximate duration of questionnaire administration for the actual study. The administration of the questionnaire took approximately 30 minutes to complete. Clarity was sought from one of the learners with regards to the term 'sugars' as she did not understand what was meant by this term. This was clarified by the researcher.

Overall, the pilot study revealed that there was clarity of understanding regarding the instructions and questions. This pilot exercise was beneficial to the researcher in that insight was gained into the expectations of the actual fieldwork, thus enabling the researcher to become more confident in conducting the study.

3.4.2.2. Actual Study

- Upon finalization of the above and on obtaining informed consent (Appendix C) from learners to participate in the study, the process of conducting the study was

done over a series of days using the flexi-time slot with the help of the Life Orientation educators.

Completed questionnaires were collected and stored in a locked cupboard at the Department of Psychology at the University of KwaZulu-Natal.

3.4.3. Data Collection Measures

Two self-administered questionnaires were completed by the respondents. The questionnaires included the South African Youth Risk Survey (Appendix D) and the Sexual Risk Norm Sub-Scale (Appendix E).

3.4.3.1. The South African Youth Risk Behaviour Survey

This survey questionnaire was developed in English by the Human Science Research Council (HSRC), in collaboration with the Reproductive Health Research Unit (RHRU) and the Medical Research Council (MRC) to assess the prevalence of South African youth risk behaviours. It is a closed-ended questionnaire and draws on the experience of The Youth Risk Survey designed in the United States of America. The survey had been previously pre-tested for face and construct validity for use in the South African context (Reddy et al., 2003).

In view of the fact that this study is part of a broader study on health related behaviours, the study was delineated to focus on items 36 to 46 of the youth risk behaviour survey. In addition, closed ended questions concerning demographics such as age, gender, grade and race were used. With regards to race, the researcher included a footnote emphasizing that

the term ‘race’ referred to a racial categorization of a sector of the South African population that originated from the Apartheid era, and had been used in our present context in order to highlight its historical and socially constructed nature, as well as for its strategic value in our present context for historical and socio- economic redress initiatives. Questions in the survey also entailed responses around adolescent sexual behaviour with regards to the following:

- Views by friends on abstinence and condom use
- Most influential people with regards to sexual behaviour
- Were the respondents sexually active or not?
- Sexual Debut
- Number of partners in a lifetime as well as number of partners during the last three months prior to completion of the questionnaire
- Condom use at last sexual intercourse
- Method used to prevent pregnancy

3.4.3.2 The Sexual Risk Norm Sub-Scale

This measure, attached in Appendix E, consisted of a sub-scale measuring sexual risk norms for abstinence and safer sexual practices (condom use). The original 38 item scale, comprising of sub-scales measuring attitudes about safer sex, normative beliefs, intention to try to practice safer sex, expectations about the feasibility of safer sexual activity, perceived susceptibility to HIV/AIDS, and substance use had been developed by De Hart and Birkimer (1997). The scale was piloted on a sample of 28 undergraduate students and following item refinement the scale was then administered to a sample of 296

undergraduate students to evaluate the practicality and psychometric utility of items generated in the pilot study (De Hart & Birkimer, 1997). The internal reliability for the overall scale as well as for the normative belief sub-scale was found to be good with a Chronbach Alpha of 0.86 and 0.84 respectively (De Hart & Birkimer, 1997). This sub-scale measuring normative beliefs about sexual behaviour, called The Sexual Risk Norm sub-scale was used for data collection for the purposes of this study.

The normative beliefs sub-scale was adapted for the purposes of this study using 5 of the original 7 items from De Hart and Birkimer's (1997) scale to measure norms for abstinence and safer sex. The items measured attitudes about safer sex (abstinence and condom use), peer normative beliefs and intention to try to practice safer sex. The four response possibilities to each of the 5 items were Definitely Not True, Not True, Partly True and Certainly True.

3.4.4. Reliability of the Sub-Scale in this study

Reliability refers to the extent to which the same set of results will be yielded in replications of the study (Terre Blanche & Durrheim, 1999). Terre Blanche and Durrheim (1999) define internal consistency as measures of reliability that are 'estimated by determining the degree to which each item in a scale correlates with each other item' (p.90). The degree of internal consistency was determined using Cronbach's Alpha coefficient, which ranges from 0 (no internal consistency) to 1 (maximum internal consistency). A questionnaire type scale is generally considered internally consistent (reliable) if there is an alpha value of greater than 0.75 (Terre Blanche & Durrheim, 1999). Table 1 illustrates the alpha coefficient for test items on the Sexual Risk Norm Sub-scale (SRNS) used for this study.

Table 1: Alpha Coefficient for SRNS Test Items

Cronbach's Alpha	No. of Items
.726	4

On the sample used in this study, the sexual risk norm sub-scale with 5 items had a reliability of 0,599, indicating a moderate degree of internal consistency and stability amongst the items relating to sexual risk norms. The item total statistics showed that if item 4 was omitted, the reliability would improve. Therefore, item 4 on the SRNS had been omitted so as to improve the reliability of this study. As indicated in table 3.1 above, the reliability for SRNS excluding item 4 was 0.726. This means that there was a fair degree of internal consistency amongst the test items.

3.4.5. Data Analysis

Terre Blanche and Durrheim (1999) state that quantitative data analyses uses forms of principled statistical argument allowing the researcher to make claims about the nature of the sample. With reference to this study, quantitative analysis was used to examine the relationship between high levels of protective peer norms (the independent variable) and adolescent sexual risk behaviour (the dependent variable), measured in terms of age of sexual debut, condom use at last sexual encounter and number of sexual partners. Data was captured, cleaned and analysed using the Statistical Package for the Social Sciences (SPSS Version 12.5).

The responses in the South African Youth Risk Behaviour Survey ranged from A=1 to H=8. The category views on sex most supported by friends had been converted to a dichotomous variable, namely Safe sexual practices =1 for views on abstinence and condom use and Unsafe sexual practices=2 for views regarding not using condoms at all or use of condoms only with someone unknown to the respondent. Age of sexual debut had been recoded using B=1 (11 years or younger) to H=7 (17 years or older) and was used as a continuous variable. Condom use at last sexual encounter was also recoded where condom use at last sexual encounter was B=1 (yes) and C=2 (no). The item regarding ever having had sexual intercourse was measured by Yes = 1 and No = 2.

Demographic characteristics of the sample included age, gender, race and grade. Frequencies and cross-tabulations were used to examine variables in the full sample. Grade 10 respondents (n=40) were combined with grade 9 respondents (n=6), as there were a few respondents from grade 9, to form one category. This item was then dichotomized using grades 9 & 10 = 1 and grade 11 = 2. The category sexual partners had been dichotomized with responses for 2-6 partners being viewed as 'multiple partners', implying sexual risk behaviour (1 partner = 1 and 2-6 partners = 2).

In the full sample, cross-tabulations and frequencies were used to examine demographic variables and sexual activity. Cross-tabulations, frequencies and chi-square tests were used to investigate most influential person with regards to sexual behaviours in both sexually active and not sexually active sub-samples. The Mann-Whitney test is generally used to assess whether two independent samples of observations of continuous measurement come from the same distribution, and is the non-parametric equivalent of

the t-test. This test was done on the full sample to determine the statistical significance between sexual norm mean scores and mean scores on the item of views about sex most supported by friends. The Mann-Whitney test was also used to establish whether high levels of protective peer norms influence views on safer sexual practices among adolescents. Analyses of the full sample also included the use of t-tests to examine significant differences between the means of the different sample groups. T-tests were also used to establish the differences between high levels of protective peer norm influence and sexual risk behaviour in both the sub-samples of sexually active and not sexually active groups. Furthermore t-tests were used to assess gender differences in terms of sexual norm mean scores. In view of the fact that sexual risk norms were higher for females than for males, t-tests were used to assess differences in sexual risk norms in sexually active and not sexually active females only.

In the sexually active sub-sample, frequencies and cross-tabulations were used in examining demographic variables of gender and grade in terms of sexual activity. Demographics of age and gender in relation to sexual behaviour in terms of number of sexual partners, condom use at last sexual encounter and age of sexual debut were assessed using one-sample chi-square tests of independence. Independent sample t-tests were used to examine gender differences in the mean scores of sexual risk behaviour with regards to condom use at last sexual encounter, age of sexual debut and number of sexual partners, where condom use at last sexual encounter was measured using B=1 (Yes) and C=2 (No). Number of sexual partners was measured using the dichotomy of 1 partner and 'multiple partners' (1 partner = 1 and 2-6 partners = 2). The Mann-Whitney test was conducted to examine the statistical significance between sexual norms and condom use

at last sexual encounter. This test was also used to assess differences in terms of sexual norms and number of sexual partners of respondents.

3.5. Ethical Considerations

The Research Ethics committee of the Faculty of Humanities, Development and Social Sciences of the University of KwaZulu-Natal approved the research proposal for this study (Ethical clearance approval number: HSS/06461A). Furthermore, the Research and Education Management Information Services (EMIS) sub-directorate of the Department of Education, KwaZulu-Natal approved the proposal and permission was granted by this sub-directorate to conduct the study at the school (Appendix B). Ethical considerations of assent, informed consent and confidentiality had been adhered to in conducting this study. Permission from the principal of the school had also been obtained (Appendix A). Due to logistical problems with regards to parental consent for learners to participate in the study the school governing body, acting on behalf of the parents, was consulted to obtain parental consent for the study.

The respondents completed an informed consent form (Appendix C). This form requested permission from learners to participate in the study, and summarized the nature and purpose of the study. Learners were informed that their participation in the study would assist the researchers in gaining more insight into adolescents' behaviours that pose health risks. Furthermore, they had been informed that their participation in the study was

of a voluntary nature. They were assured of confidentiality and anonymity and were afforded the opportunity to withdraw from the process at any time, if they no longer desired to be part of the process. To minimize feelings of coercion, participants were informed that their decision to participate or not to participate in the study would have no effect on their academic performance. Confidentiality issues were emphasized and educators and learners were assured that the individual information from the study would not be divulged to anyone. Again, it was reiterated that learners reserved the right to withdraw from the study at any time, if they so desired. Contact details of various independent referral agencies that offered counselling services were provided in the event of any issues or traumas arising due to the content of the study. Contact details of the supervisors of the study were also provided.

3.6. Conclusion

Details of aims, objectives and hypotheses of the study, as well as methodology and procedures used in terms of sampling, data collection and measuring instruments has been outlined in this chapter. In addition, an outline of statistical analyses as well as ethical considerations for the study has been presented. The following chapter explores in greater detail the statistical analyses and results of the study.

CHAPTER FOUR

RESULTS

4.1. Introduction

Analyses of the results of the study conducted to establish whether an association does exist between sexual risk norms and adolescent sexual risk behaviour, and if so, what the association is, are presented in this chapter. Data collected has been captured, cleaned and

analysed using the Statistical Package for the Social Sciences (SPSS Version 12.5). Relevant statistical techniques were used in an attempt to establish whether there was a significant relationship between adolescent sexual risk behaviour (the dependent variable) and protective peer norms (the independent variable). A brief report on the full sample of adolescent sexual behaviours will be presented followed by a report on the sexual behaviours of the sub-sample of sexually active respondents.

4.2. Adolescent Sexual Behaviours of the Full Sample

4.2.1. Demographic Data of Respondents

The demographic details of respondents have been categorized into age, gender, grade and race. Table 2 illustrates frequencies and percentages of respondents according to these categories. The total sample consisted of 259 respondents (N = 259), from grades nine, ten and eleven. Table 2 also illustrates the frequencies and percentages of adolescent sexual behaviours. At least two thirds of the respondents reportedly had not had sexual intercourse, that is, 68% of the respondents had not engaged in sexual intercourse, while 32% had previously engaged in sexual intercourse.

Table 2: Sample Composition by Demographics (N = 259)

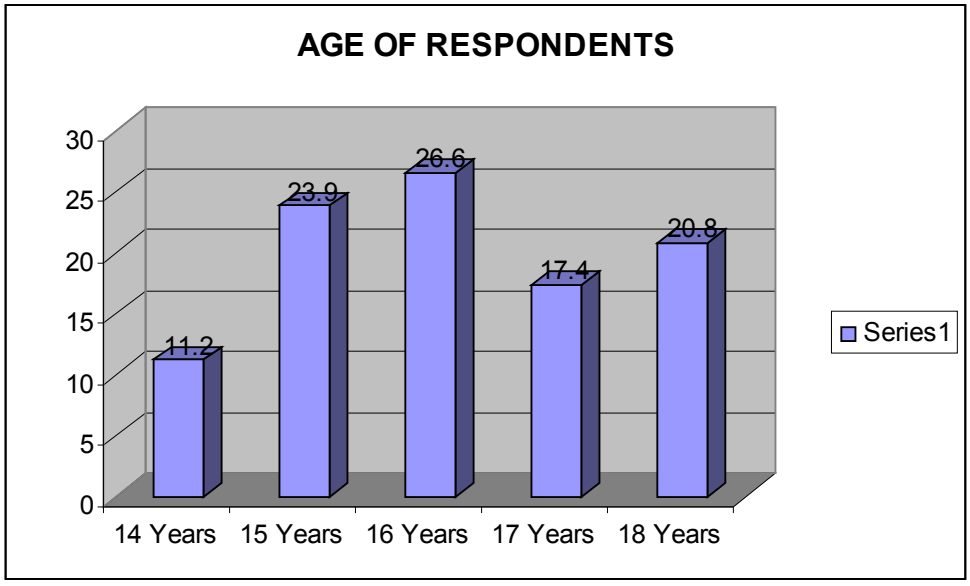
	Frequency	Percent

Gender	Male	114	44.0
	Female	145	56.0
Age	14	29	11.2
	15	62	24.0
	16	69	26.6
	17	45	17.4
	18	54	20.8
Grade	9	31	12.0
	10	109	42.1
	11	119	45.9
Race	African	210	81
	Indian	37	14
	Coloured/Mixed Race	12	5
Engaged in sexual intercourse			
	Yes	84	32
	No	175	68

4.2.1. 1. Age Groups of Respondents

The age of respondents ranged from 14 to 18 years. 11.2% of the respondents were 14 years of age, 24% were 15 years of age, 26.6% were 16 years of age, 17.4% were 17 years of age and 20.8% were 18 years or older. Figure 2 provides a graphic representation of the age distribution of the sample population.

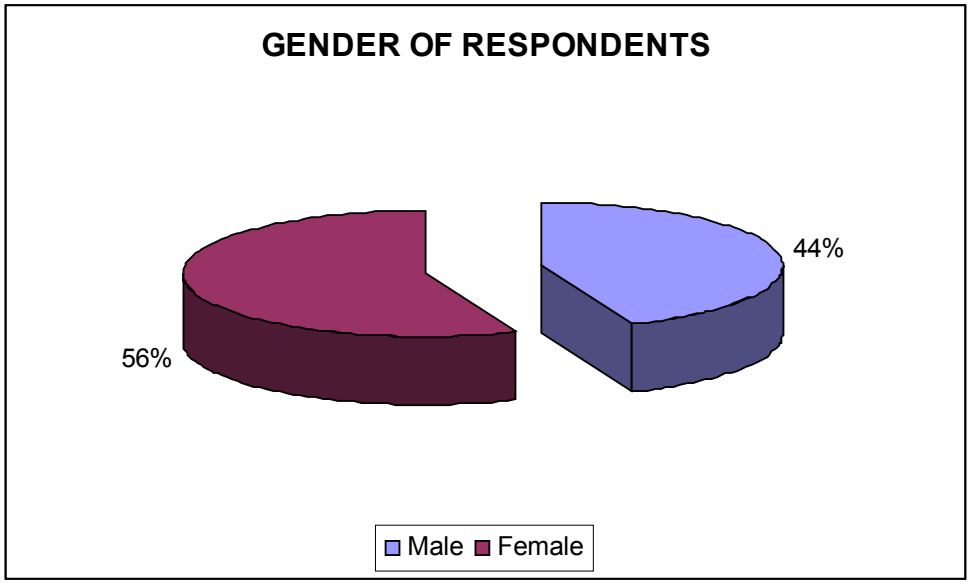
FIGURE 2: Age of Respondents (N = 259)



4.2.1.2. Gender of Respondents

The majority of respondents was female and constituted 56% of the sample population, while males constituted 44% of the sample population. Figure 3 illustrates the gender distribution of the respondents.

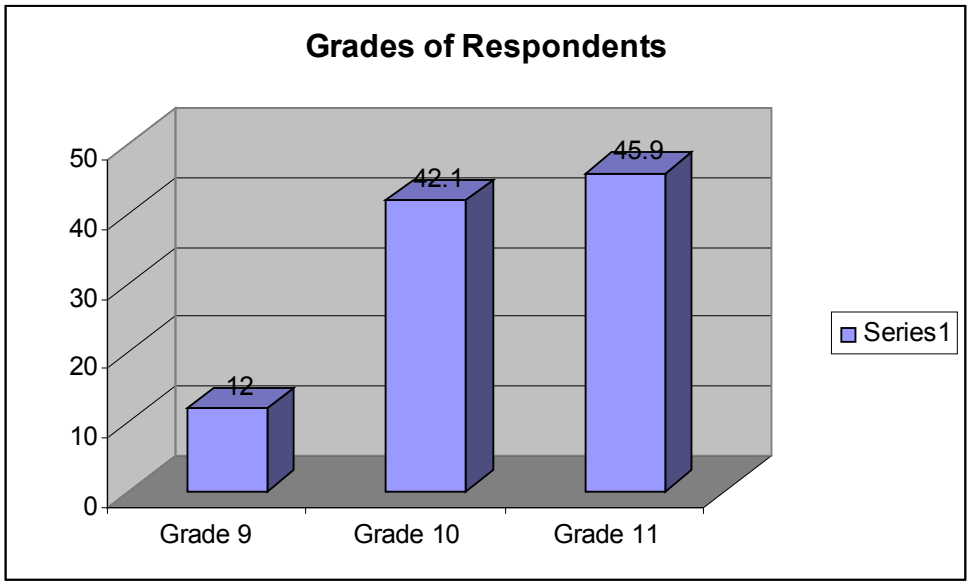
FIGURE 3: Gender of Respondents (N = 259)



4.2.1.3. Grade Level of Respondents

Twelve percent (12%) of the respondents were in grade nine, 42.1% were in grade ten and 45.9% were in grade eleven. Figure 4 provides a graphic representation of the grade distribution of the sample population.

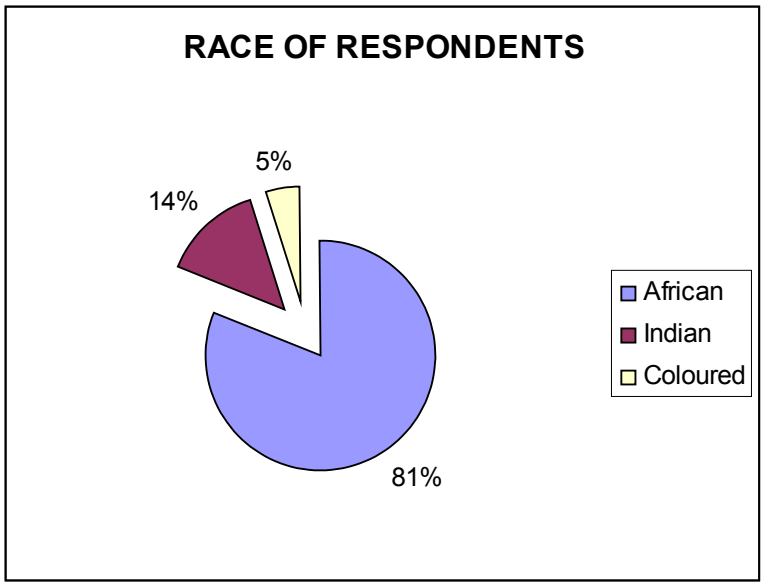
FIGURE 4: Grade Level of Respondents (N = 259)



4.2.1.4. Race of Respondents

There were no respondents from the white race group, and the majority of the learners at the school were black African learners (81%). Fourteen percent (14%) of the respondents were Indian and 5% of the respondents were of the Coloured/mixed race. Figure 5 illustrates the representation of race groups in the sample population.

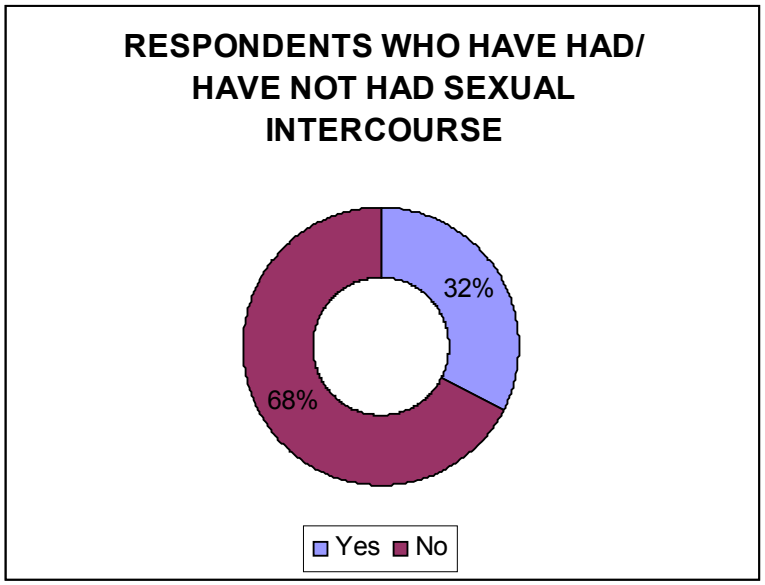
FIGURE 5: Race of Respondents (N = 259)



4.2.1.5. Respondents who have had/ have not had sexual intercourse

Sixty eight percent of the respondents indicated that they have not had sexual intercourse while 32% of the respondents indicated that they had had sexual intercourse. This is illustrated in figure 6.

FIGURE 6: Respondents who have had/ had not had sexual intercourse



4.2.2. Demographic Variables and Sexual Behaviour

The cross-tabulation between sexual activity of the two sub-samples, namely those who had previously had sex and those who had not had sex, and gender of the respondents is illustrated in table 3.1. Of the total sample, there were more males (20.1%) than females (12.4%) who were sexually active and more females (43.6%) than males (23.9%) who had never had sex. The cross-tabulation between respondents' grade level and sexual activity is illustrated in table 3.2. Grades 9 & 10 have been combined. Of the sub-sample of grades 9 & 10 respondents, 33% reported that they had ever had sex, whilst 67% reported that they had never had sex. Of the grade 11 sub-sample of respondents, 32% reported that they had ever had sex, whilst 68% reported that they had never had sex.

Table 3.1: Cross-tabulation Between Gender and Sexual Activity (N= 259)

Characteristic	Ever had sex N=(84)	Never had sex N=(175)
Gender	f (%)	f (%)
Male	52 (20.1)	62 (23.9)
Female	32 (12.4)	113 (43.6)

Table 3.2: Cross-tabulation Between Grade and Sexual Activity (N=259)

Characteristic	Grade 9 and 10 (N=140)	Grade 11 (N=119)
	f (%)	f (%)
Ever had sex	46 (33)	38 (32)
Never had sex	94 (67)	81 (68)

4.2.3. Most Influential Person With Regards to Sexual Behaviours

4.2.3.1. Age of respondents and most influential person

The results of the cross-tabulation between age of respondents and the most influential person in his/her life with regards to sexual behaviours show that friends were considered

to be most influential by respondents in the categories ranging from 14 to 18 years. These results are illustrated in table 4.

Table 4: Cross-tabulation Between Age and Most Influential Person with Regards to Sexual Behaviour of the Total Sample Population (N = 247)

Most Influential Person with regards to Sexual Behaviour	AGE				
	14 (N= 29)	15 (N= 55)	16 (N= 66)	17 (N= 45)	18 (N= 52)
	f (%)	f (%)	f (%)	f (%)	f (%)
Parents/Grandparents/ Guardians	11 (38)	17 (31)	15 (23)	7 (16)	17 (32.6)
Brothers/Sisters	0 (0)	2 (4)	3 (4)	1 (2)	2 (3.8)
Friends	15 (52)	33 (60)	44 (67)	33 (73)	30 (57.6)
Other Adults	3 (10)	3 (5)	4 (6)	4 (9)	3 (6)

Changes in sample size are due to missing values on the variables concerned

4.2.3.2. Most Influential Person in Sub-samples of Sexually Active and Not Sexually Active Respondents

The results of the cross-tabulation between sub-samples of sexually active (N=82) and not sexually active respondents (N=165), and most influential person with regards to sexual behaviours show that friends were most influential in both the not sexually active sub-sample (60%) and the sexually active sub-sample (68%). It is interesting to note that

parents/grandparents/guardians remain influential in both the not sexually active sub-sample (29.1%) and the sexually active sub-sample (23%). These statistics are illustrated in table 5.

Table 5: Cross-tabulation Between Sub-samples of Sexually Active and Not Sexually Active Respondents and Most Influential Person with Regards to Sexual Behaviours (N=247).

Most influential person with regards to sexual behaviours	Sexually Active N=(82)	Not Sexually Active N=(165)
	f (%)	f (%)
Parents/grandparents/guardians	19 (23)	48 (29.1)
Brothers/sisters	4 (5)	4 (2.4)
Friends	56 (68)	99 (60.0)
Other adults	3 (4)	14 (8.5)

Changes in sample size are due to missing values on the variables concerned

4.2.3.3. Differences between sexually active and not sexually active respondents and most influential person with regards to sexual Behaviours

The result of the chi-square analysis showed a significant difference ($p<0.05$) for most influential person with regards to sexual behaviours. Friends were significantly more influential in both sub-samples. These results are illustrated in table 6.

Table 6: Chi-square analysis of Most Influential Person in the Sexually Active and not Sexually Active Sub-samples (N=247)

Variable	Most influential person with regards to sexual behaviours		
	X^2	df	p
Not Sexually Active	133.594	3	.000*
Sexually Active	89.805	3	.000*

*.Correlation is significant at p<0.05.

Changes in sample size are due to missing values on the variables concerned.

4.2.4. Differences in Views about Sex Supported Most by Friends and Sexual Risk Norms

The Mann-Whitney test (U) was done on the full sample (N=249) in order to establish whether there was a difference in sexual risk norms between respondents who indicated on the Youth Risk Survey that their friends were mostly in support of abstinence and condom use, and those who indicated that their friends were mostly in support of not using a condom at all, or using a condom only with someone you do not know. Therefore, abstinence and condom use were grouped together and referred to as views supporting safe sexual practices, while not using a condom at all, or using a condom only with someone you do not know were grouped together and referred to as views supporting unsafe sexual practices. As such, the test was conducted to establish whether high levels of protective peer norms influence views on safer sexual practices among adolescents. The results show a significant difference (p<0.05) in the SRNS at the 95% confidence level between those who support the views of safe sexual practices (M=3.02; SD=.621) and those who do not (M=2.67; SD=.746). As was the expectation of this study, those respondents who indicated that their friends supported views on safe sexual practices most, indicated higher levels of protective peer norm influence. Table 7 illustrates these results.

Table 7: Mann-Whitney Test (U) for Differences in Views Supporting Safe and Unsafe Sexual Practices and Sexual Risk Norms (N=249)

	SRNS					
	N	M	SD	U	Z	p
Views supporting safe sexual practices	229	3.02	.621	1592.0	-2.272	.023 *
Views supporting unsafe sexual practices	20	2.67	.746			

*.Correlation is significant at p<0.05.

4.2.5. Peer Norm Influence among Sexually Active and not Sexually Active Respondents

The t-test was done to assess the difference in terms of sexual norm mean scores of respondents (n =249), who have had sexual intercourse and those who have not had sexual intercourse. This test was done to establish whether higher levels of protective peer norms serve as a protective influence, through primary abstinence, to delay the initiation of sex of those who are not yet sexually active.

Table 8 illustrates the differences in the mean scores for adolescents who are sexually active and those who are not sexually active pertaining to sexual risk norms. At the 95% confidence level, there was no significant difference (p>0.05), between adolescents who were sexually active (M= 30.15; SD= 7.30) and those who were not sexually active

(M=30.38; SD= 7.74), in terms of peer norm influence. The mean scores in both groups indicate similar levels of influence with regards to sexual risk norms, that is, the level of influence by peers does not differ between the sexually active and the not sexually active sub-samples.

Table 8: T-test for differences in sexual risk norms for respondents who have had sexual intercourse and those who have not (N=249)

Variable		SRNS					
		N	M	SD	df	T	p
Ever engaged in sexual intercourse	No	167	30.38	7.74	247	2.31	.818
	Yes	82	30.15	7.30			

4.2.6. Gender Differences in Sexual Risk Norms

T-tests were done to assess gender differences in sexual risk norms (SRNS) for the total sample (n = 249). The results of the t-test show that there was a significant difference in the mean scores for males (M=28.60; SD=6.09) and females (M=31.06; SD=6.41) with regard to sexual risk norm scores as female respondents reported higher levels of protective peer norm influence than male respondents. The t-test for gender therefore indicates that sexual risk norms differ significantly between males and females with females having higher mean scores than males. Table 9 illustrates these statistics.

Table 9: T-test for Gender Differences in Sexual Risk Norms for the Total Sample Population (N=249)

		SRNS					
		N	M	SD	df	T	p
Gender	Female	137	31.06	6.41	247	3.07	.002**
	Male	112	28.60	6.09			

**.Correlation is significant at p<0.01.

4.2.7. Comparison of Sexual Risk Norms between Sexually Active and not Sexually Active Females

Based on the findings in this study that female respondents experienced sexual debut later than male respondents and that female respondents had fewer sexual partners than male respondents, t-tests were conducted to assess the difference in sexual risk norms between sexually active and not sexually active females only (n=135). The test was done to assess whether the girls who had engaged in sexual intercourse had lower protective peer norms. The results of the test are illustrated in table 10 and show no significant difference (p>0.05) in sexual risk norms between females who were sexually active and those who were not sexually active.

Table 10: T-test for Differences in Sexual Risk Norms between Sexually Active and not Sexually Active Females (N=135)

Variable	Gender	Std. error					
		n	M	Sd	df	t	P

Sexually Active SRNS 1235		Female	26	3.03	.709	135	1.013	.313
Not Sexually Active			109	3.19	.749			

4.3. Sexual Behaviours of Sexually Active Respondents

4.3.1. Descriptive Statistics

In terms of demographics of gender in the sexually active sub-sample, there were more males (61.9%) than females (38.1%) who had been sexually active. In terms of grade level, there is a higher proportion of grade 10 respondents who had been sexually active. These results are illustrated in table 11.1. Sexual risk behaviours of the sub-sample of respondents who have ever engaged in sexual intercourse (n = 86), with regards to sexual debut, number of sexual partners in a lifetime and in the past three months, as well as condom use at last sexual intercourse is illustrated in table 11.2. The age of sexual debut ranged from 11 years to 17 years. The majority of respondents (25.6%) indicated sexual debut at 11 years of age, whilst 12.8% indicated sexual debut at 17 years or older. With regards to number of sexual partners in a lifetime, 29.1% had had one sexual partner, 18.6% had had 2 sexual partners, 12.8% had had 3 sexual partners and 24.4% had had 6 or more sexual partners. Furthermore, 66.6% of the respondents indicated that they were sexually active three months prior to the administration of the questionnaire. With regards to number of sexual partners in the last three months, 42.3% had had one sexual partner, 11.5% had had 2 partners, 6.4% had had 3 partners, 2.6% had had 4 partners, and 3.8% indicated having had sex with 6 or more partners. Of those who were sexually active, 33.3% indicated that they had not had sexual intercourse in the last three months.

Of the sexually active sub-sample, 72.8% of the respondents reported having used a condom at last sexual intercourse. However, 27.2% were exposed to the risk of pregnancy, STI s and HIV infection as they indicated that they had not used condoms at last sexual encounter.

Table 11.1: Demographic Characteristics of Respondents Engaging in Sexual Intercourse (n = 84)

Characteristic	**f**	**%**
Gender		
Male	52	61.9
Female	32	38.1
Grade		
Grade 9	6	7.1
Grade 10	40	47.6
Grade 11	38	45.3

Changes in sample size are due to missing values on the variables concerned

Table 11.2: Sexual Behaviours of the Sub-sample of Respondents ever Engaged in Sexual Intercourse

Sexual Behavior	f	%

Age of Sexual Debut (N=86)		
11 years old	22	25.6
12 years old	5	5.8
13 years old	9	10.5
14 years old	9	10.5
15 years old	15	17.4
16 years old	15	17.4
17 years old	11	12.8
Number of Sexual Partners in a Lifetime (N=86)		
1 person	25	29.1
2 people	16	18.6
3 people	11	12.8
4 people	7	8.1
5 people	6	7.0
6 or more people	21	24.4
Number of sexual partners in the last three months (N=78)		
Sexually active but not in the last three months	26	33.3
1 person	33	42.3
2 people	9	11.5
3 people	5	6.4
4 people	2	2.6
5 people	0	0
6 or more people	3	3.8
Use of condom at last sexual encounter (N=81)		
Used a condom	59	72.8
Did not use a condom	22	27.2

Changes in sample size are due to missing values on the variables concerned

4.3.2. Prevalence of Selected Demographic Variables and Sexual Risk Behaviours

The results of the one sample chi-square analyses conducted to compare demographic variables of gender and grade and sexual behaviour with regards to number of sexual

partners, condom use at last sexual encounter and age of sexual debut of respondents who engaged in sexual intercourse (n=84) are presented in table 12. There are significant differences ($p<0.01$) in sexual activity regarding gender. The results also show differences in sexual risk behaviour with regards to number of sexual partners and condom use at last sexual encounter.

Table 12: Prevalence of selected demographic variables and sexual risk behaviours in respondents engaging in sexual intercourse

Variable	N	X^2	df	p
Gender	84	6.857	1	.009**
Grade	84	1.190	1	.275
Number of Sexual Partners	84	15.070	1	.000**
Condom Use at Last Sexual Encounter	81	15.805	1	.000**
Age of Sexual Debut	84	12.500	1	0.52

** Correlation is significant at $p<0.01$.

Changes in sample size are due to missing values on the variables concerned

4.3.2.1. Gender

Gender differences of respondents who engaged in sexual intercourse were explored using chi-square tests. The results showed a significant difference ($p<0.01$) between male and female respondents who had engaged in sexual intercourse. 61.9% of males as opposed to 38.1% of females engaged in sexual intercourse, that is, more males are engaged in sexual activity.

4.3.2.2. Grade

Grades 9 & 10 have been combined. Although a higher proportion of those having sexual intercourse was from grades 9 & 10 (54.7%), there were no significant differences ($p>0.01$) between the different grades.

4.3.2.3. Number of Sexual Partners

Of the respondents who had ever engaged in sexual intercourse (n=86), 70.9% reportedly had intercourse with 2-6 partners, whilst 29.1% had intercourse with 1 partner. The results of the chi-square show that significantly more ($p<0.01$) respondents had had intercourse with multiple partners in their lifetime than with only one partner.

4.3.2.4. Condom use at Last Sexual Encounter

The results of the chi-square with regards to condom use during last sexual intercourse show that there is a significant difference ($p<0.01$) in the proportion of sexually active respondents who have used condoms at last sexual encounter and those who have not. Of the sexually active respondents, significantly more (72.8%) had used a condom at last sexual encounter than those who did not (27.2%) at last sexual intercourse.

4.3.2.5. Age of Sexual Debut

The results of the chi-square with regards to age of sexual debut show that there were no significant differences ($p>0.01$) between respondents in the categories of age of sexual debut.

4.3.3. Gender Differences in Sexual Risk Behaviour

Gender differences in sexual risk behaviours in terms of condom use at last sexual encounter, age of sexual debut and number of sexual partners in the sexually active sub-sample (n=82) were examined using t-tests. The results of the findings reported below are illustrated in table 13. Results of the t-test indicate significant differences ($p<0.01$) in the mean scores for males and females with regard to the number of sexual partners. There was a significantly higher number of sexual partners in the male group (M=4.75; SD=1.989), than in the female group (M=2.97; SD=1.349). Furthermore, the t-test results showed a significant difference in the mean scores for males and females with regards to age of sexual debut. Sexual debut for males occurred at a younger age (M=4.28;SD=1.98) than for females (M=6.27; SD=1.83). With regards to condom use at last sexual encounter, there were no significant differences in the mean scores for males and females.

Table 13: T-test for Gender Differences in Sexual Behaviours for Respondents Engaging in Sexual Intercourse (n=82)

Variable	Gender	Std Error					
		n	M	SD	df	t	P
Number of Sexual partners	Female	29	2.97	1.349	80	-4.324	.000**
	Male	53	4.75	1.989			
Age of Sexual Debut	Female	30	6.27	1.83	82	4.516	.000**
	Male	52	4.28	1.98			
Condom Use at Last Sexual Encounter	Female	28	2.36	.488	80	1.107	.271
	Male	54	2.24	.432			

**.Correlation is significant at $p<0.01$.

Changes in sample size are due to missing values on the variables concerned

4.3.4. Sexual Risk Behaviour and Sexual Risk Norms

4.3.4.1. Condom Use at Last Sexual Encounter and Sexual Risk Norms

The Mann-Whitney test (U) was conducted with the sample who had previously had sex (N=81) to establish whether there was a difference in peer norm influence between those who used condoms at last sexual encounter and those who did not. Therefore, the test was done to establish if there was a relationship between higher levels of protective peer norm influence and safer sexual practices (condom use). The results of the test show a significant difference at the 95% level ($p<0.05$) between those who used condoms at last sexual encounter (M=3.10; SD=.692) and those who did not (M=2.75; SD=.763). The SRNS score is higher for those who used a condom during last sexual encounter, indicating that there were higher levels of protective peer norm influence for the respondents who used condoms at last sexual encounter than for those who did not. These results are illustrated in table 14.

Table 14: Mann-Whitney Test for Differences in SRNS between those who used Condoms at Last Sexual Encounter and those who did not (N=81)

Variable			n	M	SD	U	Z	P
SRNS 1235	Condom Use	Yes	59	3.10	.692	454.00	-2.087	.037 *
		No	22	2.75	.763			

*.Correlation is significant at p< 0.05.

Changes in sample size are due to missing values on the variables concerned

4.3.4.2. Multiple Sexual Partners and Sexual Risk Norms

The Mann-Whitney test (U) was conducted with the sample who had ever had sex (N=83) to examine differences in sexual risk norms between those who have only one partner and those who have multiple partners. Therefore, the test was conducted to establish whether higher levels of protective peer norm influence serve as a protective factor with regards to multiple sexual partners for adolescents who have had sex. The results of the test indicate that sexual risk norms are not significantly different ($p>0.05$) between those with 1 partner and those with multiple partners. These results are illustrated in table 15.

Table 15: Mann-Whitney Test for Differences in SRNS for number of sexual Partners of sexually active respondents (N=83)

Variable		n	M	SD	U	Z	P
SRNS 1235 Number of Sexual Partners	1 Person	24	2.81	.767	543.50	-1.665	.096
	2-6 People	59	3.09	.699			

Changes in sample size are due to missing values on the variables concerned

4.4. Summary of Significant Results

The following is a presentation of the summary of the results of demographic characteristics, descriptive statistics, chi-square and t-test analyses and correlations between variables:

- Respondents in the study ranged from ages 14 years to 18 years and were from grades nine, ten and eleven. With regards to gender, 56% of the respondents were female and 44% were male. In terms of race, 81% were black African, 14% were Indian and 5% were of a mixed race or Coloured. Of the total sample of 259 respondents, 32% had previously engaged in sexual intercourse, while 68% had not.
- Of the total sample, there were more males (20.1%) than females (12.4%) who were sexually active. Furthermore, there were more females (43.6%) than males (23.9%) who had never had sex. In the cohort of those who had ever had sex, 33% of the grade 9 and 10 respondents reported that they had had sexual intercourse whilst 67% reported that they had never had sex. Thirty two percent (32%) of the grade 11 respondents reported having had sex whilst 68% reported that they had never had sex.
- With regards to age in the full sample, the majority of respondents in all age categories considered their friends to be most influential. Furthermore, friends were considered to be most influential with regards to sexual behaviour in both the sub-sample who had never had sex (60%) and the sub-sample that had had sex (68%). The result of the chi-square analysis showed a significant difference ($p<0.05$) for most influential person with regards to sexual behaviours. Friends were significantly more influential in both sub-samples. In terms of this study, this indicates the importance of looking at the influence of friends on adolescents' decisions to engage in or not to engage in sexual activity.
- The results of the Mann-Whitney test conducted to establish whether higher levels of protective peer norms influence adolescents' views on safer sexual practices

showed a significant difference ($p<0.05$) in sexual risk norms between those who support views of safer sexual practices and those who support views on unsafe sexual practices. Those respondents who indicated that their friends supported views on safe sexual practices most, indicated higher levels of protective peer norm influence.

- A comparison was made between the sub-sample that had never had sex and the sub-sample that had, to assess differences in peer norm influence and to examine whether there is an association between primary abstinence and higher levels of protective peer norm influence. The results showed no significant difference ($p>0.05$), between adolescents who were sexually active and those who were not sexually active in terms of sexual risk norms. Both sexually active and not sexually active sub-samples show similar levels of influence with regards to sexual risk norms.
- Results of t-tests conducted to assess gender differences in sexual risk norms (SRNS) for the total sample were statistically significant ($p<0.01$). Female respondents reported higher levels of protective peer norm influence than male respondents.
- T-tests were conducted to assess the difference in sexual risk norms between sexually active and not sexually active females only ($n=135$) to establish whether the girls who had engaged in sexual intercourse had lower protective peer norms. The results show no significant difference ($p>0.05$) in sexual risk norms between females who were sexually active and those who were not sexually active.
- The sub-sample of those who had ever had sex ($n=86$) indicated that the age of sexual debut ranged from 11 years to 17 years. Number of sexual partners ranged

from one partner to six or more partners in a lifetime. The majority of respondents (72.8%) indicated that they had used condoms during the last sexual encounter, however, 27.2% were exposed to the risk of pregnancy, STI s and HIV infection as they had reportedly not used condoms at last sexual encounter.

- One sample chi-square analyses were conducted to compare demographic variables of gender and grade to sexual behaviour in terms of number of sexual partners, condom use at last sexual encounter and age of sexual debut of respondents who engaged in sexual intercourse. The results were not significant with regards to sexual debut ($p>0.01$). However, in terms of condom use at last sexual encounter, there is a statistically significant difference ($p<0.01$) between respondents who used condoms during last sexual intercourse and those who did not use condoms. Of those respondents who had had sex, 72.8% had used a condom during their last sexual encounter while 27.2% did not use condoms. Furthermore, condom use seems to be the preferred method to avoid STIs, HIV infection and unwanted pregnancy. With regards to number of partners, the majority of respondents had intercourse with 2-6 partners (70.9%), whilst 29.1% had one partner.
- T-tests done to establish gender differences in sexual risk behaviour in terms of number of sexual partners and sexual debut in the sub-sample of those who had ever had sex showed a significant difference ($p<0.01$). Male adolescents reported a higher number of sexual partners than females. Furthermore, there was a significant difference between sexual debut and gender, as male respondents reported a younger age of sexual debut than female respondents.

- The results of the Mann-Whitney test conducted to establish whether higher levels of protective peer norms influenced condom use at last sexual intercourse among those who had ever had sex showed a significant difference ($p<0.05$). Respondents who indicated having used a condom at last sexual intercourse also indicated higher levels of protective peer norm influence than those who did not use a condom at last sexual intercourse.
- The Mann-Whitney test (U) conducted to establish whether sexual risk norms serve as a protective factor with regards to multiple sexual partners in adolescents who had ever had sex was not statistically significant ($p>0.05$), that is, there is no difference in peer norm influence between those with one partner and those with multiple partners.

4.5. Conclusion

This chapter outlined analyses of results of the study conducted to establish whether an association exists between sexual risk norms and adolescent sexual risk behaviour. A report on the full sample and sub-sample of those who had ever had sex has been presented, together with a summary of the findings. These results will be discussed and further explored in the next chapter.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This study aimed to investigate the influence of peer social norms on sexual risk behaviour in a sample of school going adolescents. This chapter focuses on the results as reported in chapter four and will be discussed in terms of the literature and theoretical framework. General trends in adolescent sexual behaviours in the total sample are first examined, followed by a discussion of sexual risk behaviours in the sub-sample of sexually active respondents. The relationship between peer normative influence and sexual risk behaviours among sexually active respondents is then discussed. Results are thereafter examined in the light of the theoretical framework. Finally, limitations of the study are explored and the conclusions and recommendations for future research ensue.

5.2. General Trends in Adolescent Sexual Behaviours

An analysis of the results showed that 32% of the total sample of 259 had previously engaged in sexual intercourse with a higher proportion of males (61.9%) than females (38.1%) being sexually active. These findings concur with the findings of other studies that showed a higher proportion of males than females being sexually active (eg., Flisher, Reddy, Muller, & Lombard, 2003). Another study found that particularly for South African males, there exists fairly strong levels of peer pressure to be sexually active resulting in increased levels of sexual activity (MacPhail & Campbell, 2001).

The present study also showed that of those who are engaging in sexual activity, a higher proportion of grades 9 & 10 respondents (17.8%) than grade eleven respondents (14.7%) are engaging in sexual intercourse. Ideally sexual risk reduction intervention programmes should be implemented prior to sexual debut in order to delay sexual persuit. Further, it is more difficult to change high risk sexual behaviour patterns once already established

(Gallant & Tyndale, 2004). These findings therefore suggest that such programmes should be implemented at primary school level with a view to empowering children and youth with knowledge and lifeskills that will assist them to make calculated, well-informed decisions with regards to their sexual behaviours before sexual debut.

Analysis of this study also indicated that friends were regarded as most influential with regards to sexual behaviours in both the sexually active sub-sample (68%) and the not sexually active sub-sample (60%). This is in keeping with other studies that have shown that adolescents are influenced by the beliefs of their peers and that their sexual lives are conducted through experiences and beliefs of the particular group that they belong to (MacPhail & Campbell, 2001). This draws our attention to the importance of peer influence on adolescents' behaviour. Tapping into the power of peer influence and how this influence can be used to inform appropriate intervention strategies to curb the HIV/AIDS pandemic, especially among our young people, thus becomes paramount.

5.2.1. Peer Sexual Risk Norms and Primary Abstinence

The analysis conducted to establish if there was a significant relationship between protective peer normative influence and primary abstinence showed no significant differences for both sexually active and not sexually active respondents. Therefore, this study did not confirm the hypothesis that those adolescents who have never engaged in sexual intercourse (primary abstinence), would have higher levels of protective peer norms than those who had engaged in sexual intercourse. Other studies have shown that association with deviant peers have a direct relationship with adolescent high risk sexual behaviours (Brook et al., 2006; Campbell & MacPhail, 2001). Research conducted in a

rural area in South Africa has also shown that peer pressure or peer normative influence was one of the reasons for young people initiating sexual activity (Buga, Amoko, & Ncayiyana, 1996).

5.2.1.1 Gender

Sexual risk norms differed significantly between males and females in the total sample population of this study, with females reporting higher levels of protective peer norms than males. Research shows that young people are aware of gender pressures and how it places their sexual health at risk. However, young women in particular are beginning to ignore peer norms and influences that support unsafe sexual practices and are intent on adopting safer sexual practices (MacPhail & Campbell, 2001). Future intervention strategies therefore need to make use of programmes that focus on developing a critical consciousness among adolescents. This could be facilitated by providing contexts in which social constructions of existing, traditional gender norms which place adolescents at risk are challenged and renegotiated so as to advocate health-enabling behaviours among adolescents.

5.3. Sexual Behaviours of Sexually Active Adolescents

This study examined sexual risk behaviours in the sub-sample of adolescents who have ever engaged in sexual intercourse with regards to sexual debut, number of sexual partners in a lifetime and in the past three months, as well as condom use at last sexual

intercourse. With regards to multiple partners, this study showed that a large proportion of adolescents (70.9%) had sexual intercourse with multiple partners (two or more partners), whilst 29.1% of the respondents had intercourse with just one sexual partner in his/her lifetime. A study by Pettifor et al. (2005) has shown multiple partners to be one of the factors that significantly increased the risk of HIV among young people, and a recommendation was that partner reduction should be emphasized in prevention programmes.

The present study also showed that there were a higher number of sexual partners in the male group than in the female group. This concurs with other studies where male adolescents reported a higher number of sexual partners than females (e.g., Pettifor et al., 2005). Speculations as to reasons for these gender differences include, but are not limited to the role of gender identity within contexts where the dominant social norms with regard to masculinity dictates that males should have early and frequent sex with as many partners as possible as alluded to by Campbell and MacPhail (2002). Studies have shown that peer influence play a greater role in adolescent male than female sexual behaviours (eg., MacPhail & Campbell, 2001; Rutter, 1985).

The majority of respondents in this study (25.6%) indicated sexual debut at 11 years of age. This finding is congruent with other studies that have shown that adolescents began having sexual intercourse at an early age (eg., Zwane et al., 2004). There are various possible reasons for the early age of sexual debut and it would be interesting for future research to explore the factors that have contributed to the early age of sexual debut, and perhaps to establish the extent to which sexual abuse is a contributing factor to early age

of sexual debut. In addition, this study showed that male respondents reported a younger age of sexual debut than female respondents. This finding is in keeping with other studies that have shown that the age of sexual debut for boys is younger than for girls (e.g., Peltzer & Pengpid, 2006).

The present study also found that 72.8% of the respondents reported having used a condom at last sexual intercourse. However, 27.2% were exposed to the risk of STI s and HIV infection as they indicated that they had not used condoms at their last sexual encounter. Furthermore, the risk of the above mentioned infections is much greater in view of the proportion of respondents (70.9%) who indicated to have had multiple partners in his/her lifetime. It may also be possible that respondents may have used other methods of contraception and so may not have been exposed to the risk of unintended pregnancy. However, research has found condoms to be the preferred choice of contraception by adolescents in South Africa (Flisher et al., 2003; Shisana et al., 2005).

5.3.1. Peer Sexual Risk Norms and Safe Sexual Practices

It was also hypothesized that of those adolescents who have ever engaged in sexual intercourse, there would be an association between higher levels of protective peer norms and safer sexual practices (condom use). The findings of this study showed that there were significantly higher levels of protective peer norm influence for the respondents who reportedly used condoms at their last sexual encounter than for those who did not use condoms. Hence, those who practiced safer sex had higher levels of protective peer norm influence.

It therefore becomes imperative that lifeskills programmes in schools harness the protective influence that peers can have in the promotion of safe sexual behaviours, especially condom use. Young people need to develop a 'critical consciousness about their sexual health' (Campbell & MacPhail, 2002, p. 334), so as to change normative attitudes, beliefs and behaviours of adolescents that may promote high risk sexual behaviour. Attempts to prevent the spread of HIV through health-enhancing behaviours need to include peer education programmes in order to create a context viable for the collective renegotiation of those prevailing social norms which serve to compromise the health of adolescents (MacPhail & Campbell, 2001).

5.4. Relevance of the Theoretical Framework

This study, which forms part of a broader study (that aims to investigate the influences of social environmental factors, self-esteem, self-efficacy, social norms, social capital and hopelessness on risk taking behaviours), has been delimited to the social normative stream of influence of the TTI in order to investigate the role of protective peer norms in adolescent sexual risk behaviour. The TTI assumes that perceived norms, acquired through social bonding and social learning, and motivation to comply jointly affects social normative beliefs directly and shapes one's choice to adopt a particular health related behaviour indirectly (Flay & Petraitis, 2004).

The findings of this study showed that those who practiced safer sex had higher levels of protective peer norm influence. The present study also showed that friends were significantly the most influential people with regards to adolescents' sexual behaviours, in comparison to parents/ grandparents/ guardians, brothers/sisters or other adults. This further entrenches the well documented body of literature in support of the fact that

friends are important and influential in adolescents' lives. The results of this study suggest that through their association with peers in their immediate social contexts who have positive attitudes to the use of condoms as a means of protection against HIV infection, adolescents were motivated to comply with their peers and adopt the protective social normative beliefs in terms of safer sexual practices. Hence, they were able to maintain health-enhancing sexual behaviours with regards to condom use and safer sexual practices as indicated by this study.

Studies have posited that 'sexuality' is a socially negotiated concept which is strongly influenced by group-based social identities and peer identities where peer norms are collectively negotiated by peer groups (Campbell & MacPhail, 2002; MacPhail & Campbell, 2001).The 'popular opinion leader' (POL) intervention has been shown to be effective, whereby social networks were used in HIV prevention messages to renegotiate social norms towards health enhancing sexual behaviours among gay communities in the United States (Somerville et al., 2006). The POL intervention makes use of popular opinion leaders who are socially influential in social networks (Kelly, 2004) to cascade risk reduction endorsement messages in their own social groups in attempts to reshape social norms and promote health-enhancing behavioural norms (Somerville et al., 2006). This model should be useful for intervention programmes aimed at changing social norms of peer groups towards more protective peer norms in terms of sexual behaviour. A change in the social normative beliefs of adolescents towards more health enhancing behaviours, may assist in attempts to reduce sexual risk taking behaviour among adolescents, and thus curb the spread of HIV among our young people.

Limitations of interventions aimed only at addressing the social normative stream of influence, is of course that the risk influences within the other streams of influence are not addressed. In addition to social normative beliefs, the TTI also includes cultural environmental influences on knowledge and values that influence attitudes, and intrapersonal (biology, self-esteem and personality) influences that impact on control and social skills, leading to self-efficacy (Flay & Petraitis, 2004). Interventions should ideally take place within these multiple streams of influence if health-enhancing behaviours are to be thoroughly effected.

5.5. Limitations of the Study

5.5.1. Due to issues of accessibility of learners, a school in the Durban Metropolitan area in KwaZulu-Natal was used for the purpose of this study. Hence, the sample population consisted of respondents from only one school in the area. In the absence of data from other schools, it may therefore not be possible to generalize the findings to other school populations.

5.5.2. Data collection had been done over a few days due to sample size and time constraints, as the questionnaires were administered during the flexi- period at school. Therefore, the possibility of contamination of responses as a result of learners discussing the content of the measuring instruments cannot be ignored.

5.5.3. Self-reporting had been used as a method of data collection for this study. Furthermore, the content of the study entailed information on sexual behaviour of the respondents. In view of the personal nature of the information requested, there may be limitations in terms of honesty and accuracy of information yielded, hence the possibility of dishonesty in reporting cannot be ruled out.

5.6. Conclusion and Recommendations

This study, which formed part of a broader study that aimed to investigate multiple levels of influence (social capital, social norms, self-esteem, self-efficacy and hopelessness) on risk behaviors among adolescents, had been delimited to the social normative stream of influence in order to investigate the role of peer norms on adolescent sexual risk behaviour.

Gender differences were evident in this study as more males than females were engaging in sexual intercourse. Age of sexual debut occurred at an earlier age for males than for females, with males reporting higher numbers of sexual partners than females. In terms of sexual risk norms, females reported higher levels of protective peer norm influences than males. The present study also showed that a higher proportion of grades 9 & 10 learners were engaging in sexual intercourse, suggesting the need for intervention programmes to be implemented at primary school level and to be more vigorous in terms of lifeskills to empower adolescents to make informed choices regarding their sexual behaviours.

This study also showed that friends were regarded as the most influential people with regard to sexual behaviours. Although this study was unable to confirm the hypothesis that those adolescents who had never engaged in sexual intercourse (primary abstinence), would have higher levels of protective peer norms than those who had engaged in sexual intercourse, the study did, however, show that within the sexually active sub-sample, there were significantly higher levels of protective peer norm influence for the respondents who used condoms at last sexual encounter than for those who did not use condoms during their last sexual experience. Therefore, protective peer norms did

influence safer sexual behaviour within the sexually active group. These findings suggest the need for lifeskills programmes to tap into the power of peer influence to assist in challenging dominant social norms that place the health of adolescents at risk, and further to include interventions to facilitate the renegotiation of peer norms towards health enhancing alternatives. Peer education intervention programmes which make use of the popular opinion leader model is recommended as a possible approach that could be adopted to achieve this objective.

Although protective peer norms is an important protective influence for the promotion of safe sexual behaviour, other factors such as adolescents' intrapersonal influences in terms of self-esteem, self-efficacy and self-control as well as attitudes and values should also be considered in the quest for the promotion of safe sexual behaviour amongst adolescents. Furthermore, it is necessary to take cognizance of the fact that no single intervention or approach works best, and there is therefore a need for a comprehensive approach that integrates multiple levels of influence to inform intervention programmes. In this regard, the theory of Triadic Influence is a useful model in formulating intervention strategies as it suggests that interventions are likely to be successful if multiple streams of influence are addressed. It is hoped that the findings of this study have illustrated the importance of addressing the social normative stream of influence, using peers in social contexts to help promote protective normative sexual behaviour.

Finally, the following recommendations for future interventions and research are made in view of the findings of this study:

5.6.1. Intervention programmes should be implemented as early as the intermediate phase level at primary schools and need to focus on lifeskills aimed at encouraging health-enhancing behaviours among young people.

5.6.2. Future research to examine ways of tapping into the power of peer influence in promoting safe sexual behaviour to prevent the rapid spread of HIV, especially among adolescents. This could be achieved by making use of the 'Popular Opinion Leader' approach so as to change the perceived norms of peer groups by advocating and endorsing more protective peer norms in terms of sexual behaviour. This could lead to changes in social normative beliefs, which may result in more health enhancing behaviours being adopted by adolescents, thus helping to reduce sexual risk taking behaviour to curb the spread of HIV among our young people.

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APPENDIX A

LETTER OF CONSENT FROM THE SCHOOL

Sea Cow Lake Secondary School
TELE/FAX : (031) 564 6010

P.O. BOX 74742
ROCHDALE PARK
4034
17 MAY 2006

To:
Prof. I. Petersen

Sir

Permission is hereby granted to conduct your research at the above institution.

Thank you

Principal
W.Ponnan

KZN DEPT. OF EDUC. & CULTURE
SEA COW LAKE SEC. SCHOOL
P.O. BOX 74742
ROCHDALE PARK
4034

APPENDIX B

LETTER OF CONSENT FROM THE DEPARTMENT OF EDUCATION

PROVINCE OF KWAZULU-NATAL
ISIFUNDAZWE SAKWAZULU-NATALI
PROVINSIE KWAZULU-NATAL

DEPARTMENT OF EDUCATION
UMNYANGO WEMFUNDO
DEPARTEMENT VAN ONDERWYS

Tel: 033 341 8523
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Private Bag X9137
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228 Pietermaritz Street
Pietermaritzburg, 3201

INHLOKOHHOVISI **PIETERMARITZBURG** **HEAD OFFICE**

Enquiries: **Reference:** **Date:**
Imibuzo: **M Francis** **Inkomba:** **0223/06** **Usuku:**
Navrae: **Verwysing:** **Datum:** **21/11/06**

RE: PERMISSION TO CONDUCT RESEARCH

TO WHOM IT MAY CONCERN

This is to serve as a notice that Charlene Kodi has been granted permission to conduct research with the following terms and conditions:

- That as a researcher, he/she must present a copy of the written permission from the Department to the Head of the Institution concerned before any research may be undertaken at a departmental institution.

- **Charlene Kodi** has been granted special permission to conduct his/her research during official contact times, as it is believed that their presence would not interrupt education programmes. Should education programmes be interrupted, he/she must, therefore, conduct his/her research during nonofficial contact times.

- No school is expected to participate in the research during the fourth school term, as this is the critical period for schools to focus on their exams.

for SUPERINTENDENT GENERAL
KwaZulu Natal Department of Education

APPENDIX C

PARTICIPANT CONSENT FORM

TITLE OF RESEARCH PROJECT:
Understanding Youth Health Behaviour

Dear Participant

1. We are requesting your participation in this research study so that we can learn more about the behaviours that put your health at risk. The information you give will help us to develop better programmes to improve the health of young people like yourself.
2. The research will be conducted by Masters Clinical/Counselling Psychology students from the University of KwaZulu-Natal under the supervision of Prof. Petersen.
3. If you agree to participate in this study, you will be asked questions about your health behaviour. Your identity will be anonymous. Following analysis of the data the questionnaires will be destroyed.
4. If you agree to participate, you will contribute to increasing our understanding of risk influences for poor health amongst the youth. This will help us devise ways to reduce risk influences and strengthen protective influences.

5. You are free to withdraw at any stage from participating in the study.
6. You may ask any questions about the study. Prof. Petersen is available on 2607423 and Prof. Anna Meyer-Weitz on 2607618.
7. Signing your name at the bottom means you agree to participate in this study.

I, _____ agree to participate in the study investigating youth health behaviour. I understand that my participation is entirely voluntary and that I can withdraw at any time. If I have any questions after today, I can call Prof Petersen on 2607423 or Prof. Anna Meyer-Weitz on 2607618.

_____ _____

Participant signature Date

APPENDIX D

THE SOUTH AFRICAN YOUTH RISK SURVEY

The following questions are about health behaviour. Please read each statement carefully and place an X in the box next to the response that most describes you. **Please be sure to read each statement carefully**.

1. How old are you?

A	13 years old or younger
B	14 years old
C	15 years old
D	16 years old
E	17 years old

F	18 years old or older

2. What is your sex?

A	Female
B	Male

3. In what grade are you?

A	10th grade
B	11th grade
C	12th grade

4. How do you describe yourself?

A	Black African
B	Asian/Indian
C	Coloured/Mixed Race
D	White

The category `race that is used in the questionnaire refers to a racial categorisation of a sector of the South African population that originated from the Apartheid era. I use the category `race in our present context in order to highlight its historical and socially constructed nature. This means acknowledging the history of prejudice and discrimination that was differentially suffered by people being labelled as `Indian', `Coloured', and `Black'. I do acknowledge that use of such categories risks perpetuating the practices that one seeks to eliminate, however it does have strategic value in our present context for historical and socio- economic redress initiatives.

The next 11 questions ask about violence-related behaviours

5. During the past 30 days, on how many days did you carry **a weapon** such as a gun, knife or club?

A	0 days
B	1 day

C	2 or 3 days
D	4 or 5 days
E	6 or more days

6. During the past 30 days, on how many days did you carry **a gun?**

A	0 days
B	1 day
C	2 or 3 days
D	4 or 5 days
E	6 or more days

7. During the past 30 days, on how many days did you **not** go to school because you felt you would be unsafe at school or on your way to or from school?

A	0 days
B	1 day
C	2 or 3 days
D	4 or 5 days
E	6 or more days

8. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife or club?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

9. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

10. During the pasty 12 months, how many times were you in a physical fight?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or 7 times
F	8 or 9 times
G	10 or 11 times
H	12 or more times

11. During the past 12 months, how many times were you in a physical fight in which you were injured and had to be treated by a doctor or nurse?

A	0 times
B	1 time
C	2 or 3 times
D	4 or 5 times
E	6 or more times

12. During the past 12 months, did you ever hit, slap, or physically hurt your girlfriend or boyfriend on purpose?

A	Yes
B	No

13. During the past 12 months, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?

A	Yes
B	No

14. Have you ever been physically forced to have sexual intercourse when you did not want to?

A	Yes
B	No

15. Have you ever physically forced someone to have intercourse with you when they other person did not want to?

A	Yes
B	No

The next 5 questions ask about sad feelings and attempts at killing oneself (suicide). Sometimes people feel so depressed about the future that they many consider attempting suicide that is, taking some action to end their own life.

16. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?

A	Yes
B	No

17. During the past 12 months, did you ever **seriously** consider attempting suicide?

A	Yes
B	No

18. During the past 12 months, did you make a plan about how you would attempt suicide?

A	Yes
B	No

19. During the past 12 months, how many times did you actually attempt suicide?

A	0 times
B	1 times
C	2 or 3 times
D	4 or 5 times
E	6 or more times

20. If you attempted suicide during the past 12 months, did any attempt result in an injury, poisoning, or overdoes that had to be treated by a doctor or nurse?

A	**I did not attempt suicide** during the past 12 months
B	Yes
C	No

5 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, one drink of alcohol refers to one beer/cooler, one glass of wine or one tot of spirits.

21. Who influences you the most when it comes to drinking alcohol and taking drugs?

A	Parents or grandparents/guardians
B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

22. During your life, on how many days have you had at least one drink of alcohol other than a few sips?

A	0 days
B	1 or 2 days
C	3 to 9 days
D	10 to 19 days
E	20 to 39 days
F	40 to 99 days
G	100 or more days

23. How old were you when you had your first drink of alcohol other than a few sips?

A	I have never had a drink of alcohol other than a few sips
B	8 years old or younger
C	9 or 10 years old

D	11 or 12 years old
E	13 or 14 years old
F	15 or 16 years old
G	17 years old or older

24. During the past 30 days, on how many days did you have at least one drink of alcohol other than a few sips?

A	0 days
B	1 or 2 days
C	3 or 5 days
D	6 or 9 days
E	10 or 19 days
F	20 or 29 days
G	All 30 days

25. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

A	0 days
B	1 day
C	2 days
D	3 to 5 days
E	6 to 9 days
F	10 to 19 days
G	20 or more days

The next 10 questions ask about illegal drug use

26. Who do you consider to be the most influential people with regards to your behaviours around drug use?

A	Parents or grandparents/guardians

B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

27. During your life, how many times have you used marijuana/dagga?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 to 99 times
G	100 or more times

28. During your life, how many times have you used mandrax or white pipe?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

29. During your life, how many times have you used **any** form of cocaine, crack cocaine or rocks?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

30. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

31. During your life, how many times have you used **methamphetamines** (also called speed, whites, crystals, tik, tuk or meth)?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

32. During your life, how many times have you used **"sugars"** (a mixture of cocaine, heroine and rat poison)?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

33. During your life, how many times have you used **ecstasy?**

A	0 times

B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

34. During your life, how many times have you taken **steroid pills or shots** without a doctor's prescription?

A	0 times
B	1 or 2 times
C	3 to 9 times
D	10 to 19 times
E	20 to 39 times
F	40 or more times

35. During your life, how many times have you used a needle to inject any **illegal** drug into your body?

A	0 times
B	1 time
C	2 or more times

The next 11 questions ask about sexual behaviour?

36. Which of the following views about sex are supported most by your friends?

A	Abstinence (not having sex at all)
B	Use of a condom every time you have sex
C	Use of a condom only with someone you do not know
D	Not using a condom at all

37. Who do you consider to be the most influential people with regards to your sexual behaviours?

A	Parents or grandparents/guardians
B	Brothers/sisters
C	Friends
D	Other adults e.g., teachers

38. Have you ever had sexual intercourse?

A	Yes
B	No

39. How old were you when you had sexual intercourse for the first time?

A	I have never had sexual intercourse
B	11 years old or younger
C	12 years old
D	13 years old
E	14 years old
F	15 years old
G	16 years old
H	17 years old or older

40. During your life, with how many people have you had sexual intercourse?

A	I have never had sexual intercourse
B	1 person
C	2 people
D	3 people
E	4 people
F	5 people
G	6 or more people

41. During the past 3 months, with how many people did you have sexual intercourse?

A	I have never had sexual intercourse
B	I have had sexual intercourse, but not during the past 3 months

C	1 person
D	2 people
E	3 people
F	4 people
G	5 people
H	6 or more people

42. Did you drink alcohol or use drugs before you had sexual intercourse the **last time?**

A	I have never had sexual intercourse
B	Yes
C	No

43. The **last time** you had sexual intercourse; did you or your partner use a condom?

A	I have never had sexual intercourse
B	Yes
C	No

44. The **last time** you had sexual intercourse, what **one** method did you or your partner use to **prevent pregnancy?** (Select only one response)

A	I have never had sexual intercourse
B	No method was used to prevent pregnancy
C	Birth control pills
D	Condoms
E	Depo-Provera (injectable birth control)
F	Withdrawal
G	Some other method
H	Not sure

45. Have you ever been pregnant?

A	Never
B	Pregnant once
C	Pregnant more than once

46. Have you ever made someone pregnant?

A	Yes
B	No

APPENDIX E
THE SEXUAL RISK NORM SUB-SCALE

The following questions are about your attitudes and your friends' attitudes towards abstinence and condom use with regards to sexual behavior. Please read the following statements carefully one by one. If the statement definitely does not describe your situation, place an X in the box indicating DEFINITELY NOT TRUE next to this statement. If the statement does not describe your situation, place an X in the box indicating NOT TRUE next to the statement. If the statement partly describes your situation, place an X in the box indicating PARTLY TRUE next to the statement. If the statement definitely describes your situation, place an X in the box indicating DEFINITELY TRUE next to the statement. **Please be sure to read each statement carefully**.

Statement	**Definitely not true**	**Not True**	**Partly true**	**Certainly True**
1. If I had sex without a condom and I told my friends, they would be angry and disappointed				
2. My friends talk a lot about				

the need to abstain or practice 'safe' sex i.e. use a condom				
3. My friends and I encourage each other to abstain or practice 'safe' sex i.e. use a condom				
4. If a friend knew that I had sex on a date, he/she wouldn't care if I had used a condom or not				
5. If I knew a friend would be tempted to have sex on a date, I would encourage him/her to abstain or use a condom				